DOCUMENT RESUME

ED 113 444 CE 004 907

TITLE	CEI Final Report: Appendices: Vol. II.
INSTITUTION	Central Susquehanna Intermediate Unit 16, Lewisburg, Pa.
SPONS AGENCY	Pennsylvania Research Coordinating Unit for Vocational Education, Harrisburg.
PUB DATE	[74]
NOTE	187p.; For related documents, see CE 004 906 and CE 004 908-10
EDRS PRICE	MF-$0.76 HC-$9.51 Plus Postage
DESCRIPTORS	Advisory Committees; Bibliographies; *Career Education; Community Resources; Educational Resources; Elementary Secondary Education; *Inservice Teacher Education; *Institutes (Training Programs); Learning Laboratories; Measurement Instruments; Newsletters; Occupational Information; *Program Development; Regional Programs; *Resource Materials; Teacher Attitudes
IDENTIFIERS	Pennsylvania; *Thematic Resources Activities for Career Education; TRACE

ABSTRACT

The second volume of the final report on a regional inservice training institute in career education for teams of selected Pennsylvania educators, the document is a collection of 14 appendixes to the actual report of the organization and proceedings of the institute, which was held in three one-week sessions at four-week intervals. The appendixes are comprised of: (1) materials related to the proceedings of the institute, such as team meeting minutes, sample communiques, agendas, and worksheets; (2) career education resource materials, such as Bureau of Employment Security listings, job cluster descriptions, and occupational outlook information; (3) reference materials for program implementation, such as learning center guides, bibliographies, sample newsletters, and a booklet from a career education project in Cashmere, Washington, on generating community involvement through an advisory board; (4) evaluation forms used by the Pennsylvania institute to assess its effectiveness; and (5) the Career Education and Teacher Change Assessment Scale administered to institute participants. (AJ)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

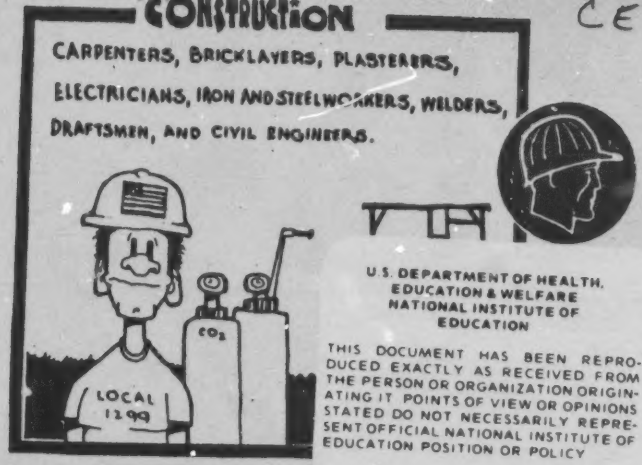
SEP 08 1975
CE
FD113444
CE004907

Central Susquehanna Intermediate Unit (I.U. #16)

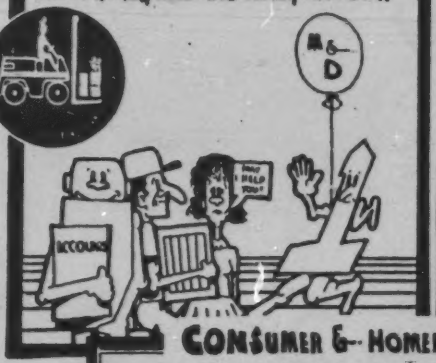
career education services

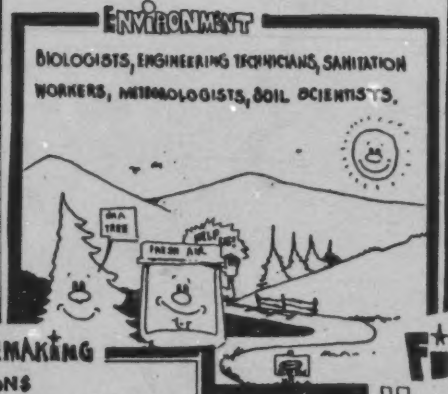
vol. II
CEI FINAL REPORT
APPENDICES

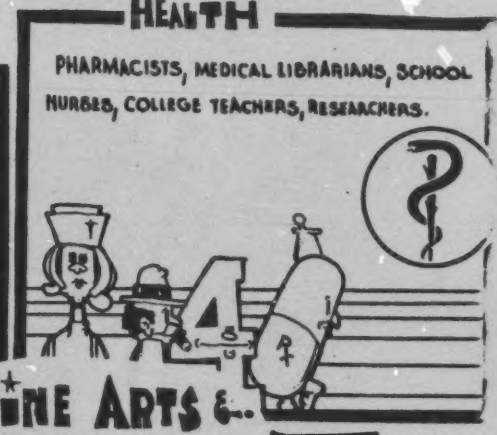
BUSINESS AND OFFICE
TYPISTS, FILE CLERKS, BOOKKEEPERS, ACCOUNTANTS, COMPUTER SPECIALISTS, STENOGRAPHERS AND EXECUTIVES.
TYPE, TYPE, TYPE
NOTE PAD


CONSTRUCTION
CARPENTERS, BRICKLAYERS, PLASTERERS, ELECTRICIANS, IRON AND STEELWORKERS, WELDERS, DRAFTSMEN, AND CIVIL ENGINEERS.
LOCAL 1299

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY







CONSUMER & HOMEMAKING OCCUPATIONS
COOKS, CHEFS, DIETICIANS, WAITERS, WAITRESSES, FASHION DESIGNERS, JANITORS, MAIDS, ECONOMISTS, NUTRITION EXPERTS, TAILORS, SEAMSTRESSES, ...
HOME SWEET HOME

FINE ARTS & HUMANITIES
WRITER, ARTIST, DANCER, INSTRUCTOR, ACTOR, SCULPTOR, ACTRESS, MUSICIAN, ENGINEER, DESIGNER, TECH MAN, SINGER....
NOVELS

CE004907

APPENDIX VOLUME II

TABLE OF CONTENTS

A. Career Education and Teacher Change Assessment (CETCA)

B. CEI - Week 1 & 2 - Agendas and Goals

C. Pennsylvania Career Development Goals

D. Team Meeting Minutes and Sample Communique

E. CEI - Week 3 - Agenda and Worksheets

F. Learning Center Guides

G. CEI - 3-day Workshop Agenda

H. Bureau of Employment Security Listings

I. Advisory Council Handout

J. Career Education Update

K. New Career Education Information (Samples)

L. Career Education Bibliographies

M. Project Evaluation Forms

N. Project Information Forms

APPENDIX A

Career Education and Teacher Change Assessment Scale

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT
CAREER EDUCATION INSTITUTE
Box 213
Lewisburg, Penna. 17837
717-524-4431

INSTRUCTIONS

The following is a three-part survey of your opinions about various areas of education. There are no right or wrong responses, so do not hesitate to mark the statements frankly. In answering each statement we want your personal opinion. We have tried to cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others. Whether you agree or disagree with any statement, you can be sure that many other people feel the same as you do. Please be sure you DO NOT OMIT ANY STATEMENT.

Respond to each of the items in Parts I and II as follows:

Strongly Agree:	+2	Strongly Disagree:	-2
Agree:	+1	Disagree:	-1

For example, if you strongly agree with a statement, you would write +2 on the short line preceding the statement, but if you should happen to disagree with it, you would put a -1 in front of it. Respond to each statement as best you can. Go rapidly but carefully. Do not spend too much time on any one statement; try to respond and then go on.

For Part III, place a check (✓) or an "x" in the appropriate box after each statement; that is, check whether you agree or disagree, or whether you're not sure or don't know about the statement presented.

So that we may make pre-test/post test comparisons, please code in the last four digits of your Social Security number: _____

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT
CAREER EDUCATION INSTITUTE
Box 213
Lewisburg, Penna. 17837
717-524-4431

PART I (ES VII)

____ 1. Learning is essentially a process of increasing one's store of information about the various fields of knowledge.

____ 2. The curriculum consists of subject matter to be learned and skills to be acquired.

____ 3. The learning of proper attitudes is often more important than the learning of subject matter.

____ 4. It is more important that the child learn how to approach and solve problems than it is for him to master the subject matter of the curriculum.

____ 5. The true view of education is so arranging learning that the child gradually builds up a storehouse of knowledge that he can use in the future.

____ 6. What is needed in the modern classroom is a revival of the authority of the teacher.

____ 7. Teachers should keep in mind that pupils have to be made to work.

____ 8. Schools of today are neglecting the three R's.

____ 9. Standards of work should not be the same for all pupils; they should vary with the pupil.

____ 10. The goals of education should be dictated by children's interests and needs, as well as by the demands of society.

____ 11. Each subject and activity should be aimed at developing a particular part of the child's makeup: physical, intellectual, social, moral, or spiritual.

____ 12. Right from the very first grade, teachers must teach the child at his own level and not at the level of the grade he is in.

____ 13. Teachers need to be guided in what they are to teach. No individual teacher can be permitted to do as he wishes, especially when it comes to teaching children.

_____ 14. Learning experiences organized around life experiences rather than around subjects is desirable in our schools.

_____ 15. We should fit the curriculum to the child and not the child to the curriculum.

_____ 16. Subjects that sharpen the mind, like mathematics and foreign languages, need greater emphasis in the public school curriculum.

_____ 17. Since life is essentially a struggle, education should emphasize competition and the fair competitive spirit.

_____ 18. The healthy interaction of pupils one with another is just as important in school as the learning of subject matter.

_____ 19. The organization of instruction and learning must be centered on universal ideas and truths if education is to be more than passing fads and fancies.

_____ 20. The curriculum should contain an orderly arrangement of subjects that represent the best of our cultural heritage.

_____ 21. True discipline springs from interest, motivation, and involvement in live problems.

_____ 22. Emotional development and social development are as important in the evaluation of pupil progress as academic achievement.

_____ 23. Education and educational institutions must be sources of new social ideas.

_____ 24. Children should be taught that all problems should be subjected to critical and objective scrutiny, including religious, moral, economic, and social problems.

_____ 25. One of the big difficulties with modern schools is that discipline is often sacrificed to the interests of children.

_____ 26. Teachers should encourage pupils to study and criticize our own and other economic systems and practices.

_____ 27. Children need and should have more supervision and discipline than they usually get.

_____ 28. Schools should teach children dependence on higher moral values.

_____ 29. The public school should take an active part in stimulating social change.

_____ 30. Learning is experimental; the child should be taught to test alternatives before accepting any of them.

PART II (COS)

_____1. Schools can't do much to develop positive attitudes toward work.

_____2. We now have more career education programs than we need for the disadvantaged.

_____3. Career education can do little to alleviate the problems of disadvantaged people.

_____4. Students can benefit little from career education in the elementary grades.

_____5. I think there's no harm in starting career preparation for young school children.

_____6. Early career education may stimulate a better attitude toward school work in later years.

_____7. Vocational teachers can make a real contribution to career education at the elementary level.

_____8. There is no need in the elementary curriculum for the addition of career education.

_____9. I find that individualized instruction using behavioral objectives is valuable in helping the student succeed.

_____10. I believe it is more important to work with the entire class than to spend a lot of time with individuals.

_____11. I accept the idea that individualized instruction using behavioral objectives allows students to experience success more often.

_____12. I regularly use behavioral objectives with individualized learning experiences to help my students develop to their potential.

_____13. I argue that increased emphasis on adult vocational programs would eventually reduce inner-city unemployment.

_____14. As part of a teaching team I could spend more time developing creativity, responsibility, and habits of inquiry in students.

_____15. I teach my classes without assistance and discourage others from helping.

_____16. I would greatly dislike being a member of a differentiated teaching team.

_____17. I uphold the differentiated team teaching concept as permitting a natural exchange of ideas.

_____18. I do not work well enough with others to make differentiated team teaching work.

_____19. I'm convinced that differentiated team teaching is a waste of time.

_____20. Use of differentiated team teaching would allow me to put more varied content into my lessons.

_____21. I say that differentiated team teaching is asking too much of established teachers.

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT
CAREER EDUCATION INSTITUTE
Box 213
Lewisburg, Penna. 17837
717-524-4431

So that we may make pre-test/post test comparisons, please code in the last four digits of your Social Security No. _ _ _ _

CAREER EDUCATION SURVEY

CONCERNS ABOUT CAREER EXPLORATION	AGREE	DISAGREE	NOT SURE	NO FEELING
1. Attitudes and values are more affected by early life experiences than by school experiences.				
2. Interests expressed by ten year olds are of minor importance when designing curriculum.				
3. The elementary school is not equipped to develop decision-making abilities.				
4. It is easier to work with an adolescent who has made an early career choice than with one who has made no commitment.				
5. Interests can be explored before vocational maturity is reached.				
6. Career Exploration should be given little emphasis until the child reaches adolescence.				
7. Exposure to many career alternatives serves only to confuse the elementary school child.				
8. Positive attitudes toward work do exist in, but are often and subsequently trained out of our children as early as the second grade.				
9. The skill training offered to a student should be based primarily on the results of aptitude tests administered to him.				
10. Teachers of vocational subjects tend to isolate, as well as be isolated by, teachers unversed in vocational education.				
11. The majority of parents and the business community are eager to become involved in the educational process.				

CONCERNS ABOUT CAREER EXPLORATION	AGREE	DISAGREE	NOT SURE	NO FEELING
12. The majority of school personnel will individually admit, but collectively deny, the irrelevance of much of today's curriculum				
13. Vocational training should be postponed until after high school.				
14. Vocational education is one phase of career development.				
15. Career development is a process where the pupil is exposed to the work components of his career choice.				
16. Children can be introduced in the elementary grades to ideas about working for a living and to realities of wage earning.				
17. An occupational commitment should be implicit in every student's secondary school program.				
18. The regular classroom teacher is unable to provide each pupil with occupational and career information while teaching subject matter.				
19. Career development is one component of vocational education.				
20. Occupational education is O.K. at the secondary level, but the elementary grades curriculum is already overloaded.				
21. The majority of teachers have had little or no work experience outside of teaching. Without that background, a meaningful program would be difficult.				
22. Occupational Development, as a curricular objective should encourage student awareness of career opportunities in every discipline they study.				
23. The youth revolt suggests that our culture is heading toward the non-materialistic. The push toward Occupational Development is not realistic at this time.				

CONCERNS ABOUT CAREER EXPLORATION	AGREE	DISAGREE	NOT SURE	NO FEELING
24. As an educator, I have no idea how to start to implement a program of Occupational Development.				
25. A successful program of Occupational Development would be possible if: (a) attractive, multi-media learning packages were developed and made available. (b) a massive teacher training and inservice program were mounted. (c) we had enough money.				
26. Occupational Development should be a low priority concern in K-12 curriculum development				
27. Occupational Development is one of those areas that can be ignored without any serious short-term effects.				
28. Occupational Development should be a long-term educational process in helping each child realize his aptitudes, interests, and temperament in selecting and preparing for the world of work.				
29. Let's not kid ourselves--Occupational Development isn't for all kids.				

APPENDIX B

Week I and II Agendas & Goals

1. Week I Agenda
2. Week II Objectives
3. Week II Agenda

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

CAREER EDUCATION INSTITUTE

AGENDA-- December 10 Sheraton Inn--Danville

9:00	Registration and Introduction of CEI staff	
9:30	Pre-testing	J. Lutz
10:15	Coffee & Danish	
10:45	Getting Acquainted	
11:30	Project Overview	C. Pepperman
12:00	Lunch	
1:00	HDP - K. Gearhart, M. Clark, & C. Pepperman or Consessus building exercise	
2:00	C. E. Film	
2:30	Introduction to C. E. Media	D. Cassel

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

CAREER EDUCATION INSTITUTE

Agenda - December 11-14 CSIU - Lewisburg, PA

Tuesday, Dec. 11	Orientation to and training in the use of video camera and video tape recorder. Focused for use in local business and industry. School teams will work together.
Wednesday, Dec. 12	Orientation to and training in the 8mm movie projector and 35mm slide projector. Discussion of use in local business and industrial settings. School teams will work together.
Thursday, Dec. 13	Teams "shooting film" in local businesses, industries, and the AVTS to prepare Audio visual materials for future classroom and public relations use.
Friday, Dec. 14	Team presentation of Video tape material "Shot" on Thursday; critique and discussion of need for editing for specialized use. Evaluation of CEI first week.

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

CAREER EDUCATION INSTITUTE

Phase II Objectives

1. Given instruction in writing behavioral objectives in the Mager format, i.e. signal, action, criteria, and provided relevant examples of behavioral objectives from each domain of behavior, and having read materials on the domains and levels of behavior, each workshop participant will: (a) demonstrate competency in writing behavioral objectives by preparing three (3) original objectives in the Mager format for any level of each of the domains of behavior, and (b) demonstrate competency in using the levels of the domains by writing an original behavioral objective in the Mager format for the third level (application, value, guided response) of each of the domains of behavior.

2. Provided instructions on curriculum theory, shown relevant examples of curriculum units, and given a standardized format for the CSIU curriculum units titled Thematic Resources and Activities for Career Education (TRACE), each workshop participant will demonstrate his/her ability in curriculum development by preparing an original curriculum unit that contains, as a minimum, all of the components listed in the standard format and is suitable for implementation in their classroom (or in a classroom within their school) during the spring of 1974.

3. Following sessions dealing with the career concept, the career cluster concept, and other concepts, related to career education, given the state of Pennsylvania career development education model (k-12), and provided a list of career clusters requiring special attention, each workshop participant will: (a) as a member of a team, decide upon which one of the clusters to give special attention to in the development of their TRACE, (b) acting alone, choose a minimum of two of the "concerns" in the state career development model to concentrate on and develop objectives, student learning activities, and evaluative procedures for use in their TRACE, and (c) develop as a minimum one each of the following: (1) behavioral objective, (2) concept or generalization, and (3) student learning activity for the learning domains of vocabulary, cognitive, affective, and psychomotor.

4. During the course of the workshop week devoted to career education curriculum development, each workshop participant will display an interest in career education and demonstrate the social values of responsibility, honesty, and cooperation by volunteering his expertise in developing curricular materials, completing the competencies requested, and assisting in team-oriented efforts.

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT
P. O. BOX 213 — LEWISBURG, PENNA. 17837
717-524-4431

MEMORANDUM:

TO: CEI Staff & Participants

FROM: Carl Pepperman

SUBJECT: Tentative Agenda--Week of January 14, 1974

DATE: December 27, 1973

Monday

A.M. Curriculum Theory

P.M. Writing Behavioral Objectives

Tuesday

A.M. Relating behavioral objectives to the Cognitive, Affective, & Psychomotor domains in Career Education

P.M. Career Education Concept
Presentative of State Syllabus

Wednesday

A.M. Presentation of Career Cluster Concept

P.M. Discussion--Thematic Unit Outline

Thursday

Preparation of Career Education Units & "Cluster Pacs"

Friday

Sharing of Units & Plans for Implementation

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

CAREER EDUCATION INSTITUTE

Workshop Schedule - Phase II

		Objective Mastery
Monday, January 14		
A.M.	Introductions, Again	
	Discussion - Workshop Objectives & Activities	
	Presentation - Curriculum Theory	
	Break	
	Presentation - Writing Behavioral Objectives	
Lunch	Occupations Related to Lunch	
P.M.	Activity - Bernabei & Leles Worksheets	
	Activity - Writing Original Behavioral Objectives	
	Homework - Read Pink Sheets	
		Objective 1A
Tuesday, January 15		
A.M.	Worksheets Returned	
	Presentation - Relating Behavioral Objectives to the Cognitive, Affective, and Psychomotor Domains and Their Levels	
	Activity - Write Original Behavioral Objectives to a Specified Domain and Level	Objective 1B
Lunch	Career Ed. Resources - Aides Will Share Their Monday's Visit to Harrisburg	
P.M.	Presentation - The Career Education Concept	
	Presentation and Discussion - The Penna. Career Development Education Model	
	Presentation, Discussion, and Homework - Thematic Resources & Activities for Career Education (TRACE) Format	

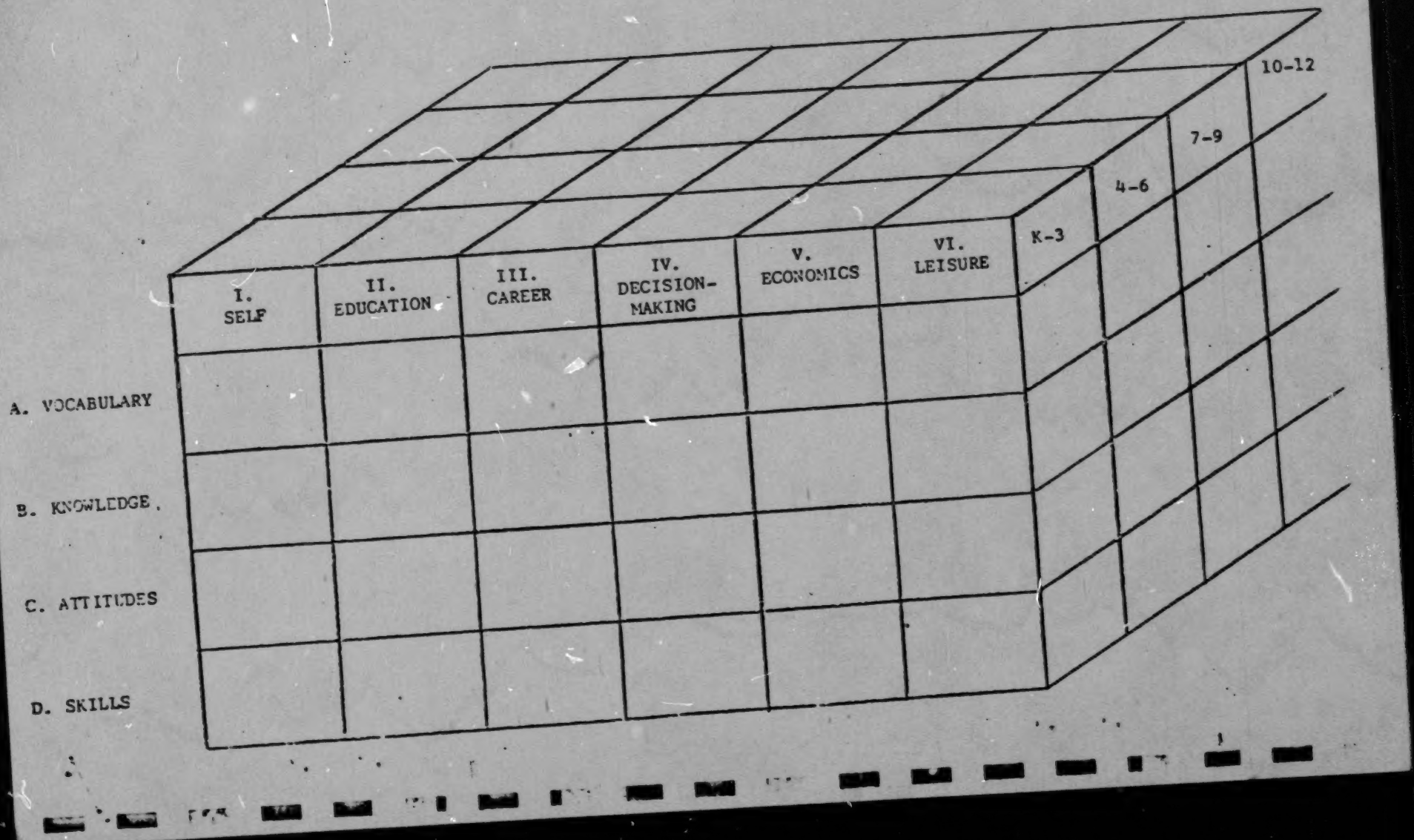
		Objective Mastery
Wednesday, January 16		
A.M.	Activity - "Listen to the Music" Presentation - The Careers Cluster Concept Activity - Relating Occupational Activities to the 15 USOE Clusters	
Lunch	Process Evaluation of Workshop	
P.M.	Activity - Would You Believe It's Puzzle Time? Activity - Sample, Peruse, Try-Out Career Education Materials From CSIU Activity - Begin Writing TRACE	
Thursday, January 17		
A.M.	Activity - Prepare TRACE	
Lunch	Share Learning Activities	
P.M.	Activity - Prepare TRACE	Objective 2 &
Friday, January 18		
A.M.	Activity - Final Work Session - Finish TRACE	
Lunch		
P.M.	Activity - Show and Tell of TRACES "Rap-up" and Posttest Submit TRACE to CSIU	Objective 4

Note: This is a tentative outline of workshop activities and is subject to change if necessary

APPENDIX C

PENNSYLVANIA CAREER DEVELOPMENT MODEL AND GOALS

K-12 CAREER DEVELOPMENT EDUCATION MODEL



CAREER DEVELOPMENT GOALS

SELF

11.0 Self-Vocabulary

11.1 Students will develop vocabulary for distinguishing self-characteristics such as interests, aptitudes, values, roles and self-concept.

12.0 Self-Knowledge

12.1 Students will develop knowledge of their own unique pattern of personal characteristics (i.e., abilities, interests, values, attitudes, etc.).

12.2 Students will understand the relationship between their pattern of personal characteristics and their functioning and performance at a given point in time--past, present, future.

12.3 Students will understand that their pattern of personal characteristics is not static but can be changed as a result of one's experience and opportunities.

12.4 Students will recognize the relationship between their pattern of personal characteristics and decision-making, as it relates to their future (i.e., educational planning, job choice, use of leisure time).

12.5 Students will understand and use the concept "role" as a way of learning about one's self in relation to one's culture and the various subcultures with which the student is associated.

12.6 Students will develop an understanding of the concept "life style" and the relationship between it and career development.

13.0 Self-Attitudes

13.1 Students will develop a positive self-concept (i.e., sense of self-respect, personal worth and a respect for one's own uniqueness).

13.2 Students will recognize that the development, understanding and acceptance of self is a life-long process that is constantly being changed and influenced by life experience.

13.3 Students will develop a sensitivity toward and acceptance of others.

13.4 Students will develop the tolerance and flexibility needed in effective interpersonal relationships.

14.0 Self-Skills

14.1 Students will develop the necessary socialization skills (i.e., fitting into various social roles, interpersonal relationship skills, ability to accept direction and responsibility).

15.0 Educational Vocabulary

15.1 Students should acquire vocabulary for educational planning (e.g., apprenticeship, on-the-job training, community college, university, curriculum, requirements, co-educational, etc.).

16.0 Educational Knowledge

16.1 Students should understand the interrelationship between education and work.

16.2 Students should be aware of the multiplicity of skills and knowledge required in various general patterns of education.

16.3 Students should develop an understanding of a changing world and be prepared for foreseeable demands in which continuing education throughout their adult life may be a normal expectation.

17.0 Educational Attitudes

17.1 Students will recognize the significance of education (i.e., the development of language, computational and reasoning skills and mastery of content knowledge) as the primary means of achieving career and life goals.

17.2 Students will recognize the continuous process that occurs both in school as well as outside of school.

17.3 Students should recognize that technological changes place future workers in a position where they may have to be prepared for retraining several times during their working career.

17.4 Students will develop through educational experiences the basic attitudes regard as necessary for entry and performance in the occupation and career of his or her choice (i.e., responsibility, perserverance, etc.).

17.5 Students should recognize the relationship between the school environment and the larger society and their corresponding need for structure and order.

18.0 Educational Skills

18.1 Students should acquire language, computational, and reasoning skills, mastery of content knowledge good work habits as primary means of moving on to the next stage of preparation for and/or entry into the career area of his or her interest.

19.0 Career Vocabulary

19.1 Students should acquire the vocabulary for describing the world of work, i.e., occupational clusters, white collar job, apprenticeship, journeyman, compensation, etc.

20.0 Career Alternatives--Knowledge

20.1 Students should understand the variety and complexity of occupations and career opportunities in the world of work.

20.2 Students should understand the way in which occupations and careers relate to the goals, needs and functions of the society.

20.3 Students should be able to determine the basic characteristics and qualifications related to the preparation for and performance of the main tasks associated with various occupational roles.

20.4 Students should understand that "career" involves progression through stages of preparation for and the performance of occupational roles and may involve a change in basic vocational education.

20.5 Students should understand the relationship between occupational role and life style.

20.6 Students should develop an understanding of the materials and tools used, and the processes associated with various occupational clusters.

21.0 Career Education--Attitudes

21.1 Students should develop an attitude in which work is seen as an integral part of the total life style (self-expression) rather than as a separate entity.

21.2 Students should develop positive attitudes toward employment, i.e., all work is important, any productive worker should be respected, it is more socially acceptable to desire to work than to desire to be idle.

21.3 Students should be aware of the fact that the way an individual thinks and feels about one's work affects his or her success in it.

21.4 Students should develop personal traits such as honesty, integrity and compatibility which are socially valued and related to job success.

21.5 Students should develop an attitude that occupational stereotyping is undesirable in that it constricts the available occupational alternatives.

21.6 Students should develop an awareness of the value of acquiring marketable skills.

21.7 Students should be aware of their own multi-potentiality relative to the development of marketable skills.

22.0 Career Alternatives--Skills

22.1 Students should develop the educational and occupational competency regarded as essential for moving on to the next stage in one's vocational development.

22.2 Students will develop entry level skills for gainful employment in an area of occupational interest.

DECISION MAKING

23.0 Decision-Making Vocabulary

23.1 Students should have the necessary vocabulary to identify and state personal goals as part of the process related to the decision-making process.

23.2 Students should be able to apply the vocabulary of career exploration to the decision-making process.

24.0 Decision-Making Knowledge

24.1 Students should understand that the decision-making process includes responsible action in identifying possible alternatives, selecting the alternative most consistent with one's values and goals and in taking the steps necessary to implement the choice of action.

24.2 Students should know that decision-making is influenced by a society of external factors (i.e, family, friends, geography) conversely, decisions once made will have an influence on a variety of external factors (i.e., family, friends, geography).

24.3 Students should recognize that the decision-making process involves a series of increasingly restricted compromises between what one wants to do and what is actually available to the individual.

24.4 Students should recognize that decision-making involves a certain amount of risk taking since the individual must make a specific choice and then follow through with the appropriate preparations.

24.5 Students will develop criteria by which occupations or other career activities may be judged for their appropriateness in meeting life career goals.

25.0 Decision-Making Attitudes

25.1 Students should appreciate the need for making a meaningful career choice and understand that such a choice requires careful planning.

25.2 Students should develop a receptivity for new ideas and exploration of new ideas.

25.3 Students should understand the necessity for taking responsibility for making their own decisions and for the results of those decisions when made.

26.0 Decision-Making Skills

26.1 Students should develop effective decision-making strategies and the skills for carrying them out.

ECONOMICS

27.0 Economic Awareness--Vocabulary

27.1 Students should develop a sufficient vocabulary for the understanding of basic economic principles.

28.0 Economic Awareness--Knowledge

28.1 Students should be familiar with basic economic concepts, i.e., scarcity, specialization, division of labor, market mechanisms and monetary system as they clarify the economic life of the home, the neighborhood, the community, the state and the nation.

28.2 Students should understand the nation's economic structure and be able to relate the factors which effect that structure to the changing labor market.

28.3 Students should understand the nature of technological change and its effects upon the world of work.

28.4 Students should understand the relationship between various occupational roles and related personal economics and life styles.

29.0 Economic Awareness--Attitudes

29.1 Students should recognize that work is the primary method of gaining economic independence and security for one's self and one's family.

29.2 Students should recognize that society needs the labors of all of its people, both men and women, in order to be a viable economic enterprise.

29.3 Students should recognize that economic concerns, although clerical, should not be the sole basis for career choice.

29.4 Students should recognize that worker productivity is influenced by a variety of rewards and satisfactions, (i.e., money, prestige, personal satisfaction and accomplishment).

30.0 Economic Awareness--Skills

30.1 Students should acquire basic money management skills.

30.2 Students should be able to utilize economic information in the decision-making process.

30.3 Students should acquire basic consumer skills.

LEISURE

31.0 Leisure--Vocabulary

31.1 Students should develop a sufficient vacabulary in order to differentiate between various kinds of leisure time activities.

32.0 Leisure--Knowledge

32.1 Students should develop an understanding of the differences between leisure and idleness (i.e., wise use of non-working time vs waste of time).

32.2 Students should understand that leisure time activities can influence, and in turn be influenced by, one's career choice.

32.3 Students should understand that leisure time activities are gaining the same social acceptance and provide the same personal satisfactions that have traditionally been acquired through work.

33.0 Leisure--Attitudes

33.1 Students should develop positive attitudes toward the value of leisure time activities as contributing to their personal well being.

34.0 Leisure--Skills

34.1 Students should develop skills in leisure time activities of their choosing for the purpose of gaining variety and personal fulfillment in their lives.

ICERN 12: Self-Knowledge

AL 12.1: Students will develop knowledge of their own unique pattern of personal characteristics (i.e., abilities, interests, values, attitudes, etc.)

Behavioral Objectives	Activities
.12 Given an explanation of the term abilities, each student will be able to list three (3) things he/she is able to do well and three (3) things he/she is unable to do as well as the student would like.	--Divide the class into small groups and have each child make a list of those things he/she does best and which interests each pupil the most. Then have each child write one item which he/she thinks each other pupil in the group does best or is interested in the most. Center group discussion around a comparison of each child's own list and the other group members' items. --Give the child an opportunity to tutor or teach pupils at lower grade levels in areas of the student's strength.

5

NCERN 19: Career--Vocabulary

AL 19.1: Students should acquire the vocabulary for describing the world of work (i.e., occupational clusters, white collar job, apprenticeship, journeyman, compensation, etc.)

Behavioral Objectives	Activities
.13 Given a list of 50 occupations and the 15 occupational clusters in which the occupations fall, the student will be able to correctly match at least 80% of the occupations with the correct cluster.	--Play "Passwork" game. Student will offer vocabulary words until someone can guess the occupation and its cluster. --Explore one product common to the class. What jobs are necessary to create this product? Make a display using a tree configuration with the product as the trunk and related jobs the branches.

APPENDIX D

Minutes and Sample Communique

1. Team Meeting Minutes (Feb.)
2. Team Meeting Minutes (March)
3. Consultation Schedule
4. Workshop Announcement
5. District Participant Notification
6. Community Response
7. Final Participant Dinner Invitation

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

MEMORANDUM

TO: Millville CEI Team

FROM: Marie Clark

DATE: February 28, 1974

SUBJECT: Minutes of Millville Elementary CEI Team meeting, held February 27, 3:30 to 4:30, with the following present:

Dave Cooper, Ed. Gerler, Arwilda Shoemaker, Irene Mitchell, Karen Rosenberg, Marie Clark

Discussion was held on TRACE Units and Merrills' cririquing. A memo is expected from IU next week concerning the dates re-written TRACE Units are due, and bibliography guidelines. Copies of TRACE Units are to be sent to Arwilda, Irene and Karen. The suggestion was made to share copies of TRACE's with the school board at the end of the year.

A Board presentation has already been given on February 12. This was a Guidance centered program, but pictures were included of Career Ed. activities. Arwilda gave an explaination of her TRACE.

The Team is volunteering to present the April meeting of the Improvement Club (PTA). Dave will make the arrangements. At this time the community will be invited to view the video tapes. Irene is to send slides to Marie for prints which will be utilized in advertisement of meeting.

The subject of an advisory committee is to be discussed at the next meeting. It was agreed that this should be a separate group from the Guidance committee. A function of this committee might be assistance with a resource and role model directory but no agreement was reached. The names of Philicia Girton and Mrs. Wittington were mentioned as valuable resources.

Each member will send to Marie next week, a brief statement about ideas, materials or activities that they wish to share with others via a newsletter.

Interest was expressed favoring a training program to be held for other district personnel. Ed assured the group there were persons interested. The opinion of the group was that school day-time is preferrable to evenings or weekends. Several expressed an interest in "training" to train others.

Information shared included:

1. Dave expressed enthusiasm with packet services and suggested use of booklets as format for future media.

2. A directory of places to take children is available from Dr. Washburn at Bloomsburg State College.

3. Arwilda has list of parents who are willing to give assistance.

4. Gloria has started a collection of resources for each cluster. This includes pictures and information.

5. Karen has a video tape about a flight instructor.

Marie agreed to arrange for use of video tape of Berwick for Arwilda within the next two weeks. Locatiton of slum area in Harrisburg is to be found along with assistance given for field trip to Harrisburg.

Next meeting is to be held Wednesday, March 20, at 3:00. The agenda will include some presentations of New Career Educational ideas.

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

MEMORANDUM

TO: Sue Skiptunis, Margaret Hartman, Betty Underwood, Anne Javsicas, and Shirley Kressler.

FROM: Marie Clark

DATE: March 11, 1974

SUBJECT: Summary of Team Meeting held March 8, 1974.

Betty, Anne and Sue will attend the Career Education Institute Meeting on Thursday, March 14 at 7:00 at Berwick, High School for the purpose of designing a standardized evaluation form for TRACE's. An additional task for this meeting will be the development of a form for use in recruiting role models or speakers for a directory.

Approval was given for the establishment of an advisory committee. Anne will seek approval from Dr. Magill for this activity. One possible function of this committee will be assistance with the directory. The team will meet next Friday to discuss possible names for committee.

Anne agreed to check with Dr. Magill on a date for a short board presentation describing the Career Education Institute Project and activities. It was agreed that as many participants as could be present would enhance the effectiveness.

Discussion was held on difficulties in placing long distance calls to the Intermediate Unit. Marie promised a discussion with project director for possible alternative actions.

Marie announced that money is available for field trips related to their TRACE Units. She also offered to help anyone personally with their TRACE.

The following ideas and information were shared:

Shirley plans to develop a slide series on Careers based on the alphabet. A=Actor, B=Baker, etc.

Betty told of a Unit being taught at Beaver utilizing the Agri-Business and Manufacturing Clusters.

Sue is planning to capture her field trip with 8mm film and then using it next year for a motivational activity.

Anne is considering designing mini-courses designed around the clusters.

Betty described her TRACE Unit involving 8 "problem" kids. It involves a behavior modification element with behavior contracts. The children are highly motivated to remain in project. Cooperation of students has been overwhelming as evidenced by excessive ammount of magazines brought from home. An assembly line was established to find pictures (inspector), cut (trimmer), and clean-up (scrap collecting).

Shirley expressed her change in opinion that Goal 8 of EQA was not applicable for 1st Grade. She now is using this as one point to be discussed at her parent conferences explaining the need for Career Awareness.

Anne shared her experiences with the 5th Grade "Dream-Cream" kids. Half of the class makes ice-cream and the other half is an advertising Agency. They have their own designed and produced video ads for "Dream Cream" which costs 10¢.

Marie promised to do the following:

1. Obtain a list of films and books for the primary level on Marketing and Distribution and Consumer Clusters for Shirley.

2. Obtain Millville's media on the Dairy Farm for Sue.

3. Order film (35mm and 8m) from Dick Cassel when requested by Sue, Betty and Shirley for their Career Education projects.

4. Set date for next team meeting at Career Education Institute March 25th.

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

MEMORANDUM:

TO: Principals, CEI Participants

FROM: Marie Clark

DATE: February 13, 1974

SUBJECT: Career Education Institute

On Wednesday, February 27, and Thursday, February 28, Merrill Meehan will be visiting each of your schools for 1/2 day to have a personal consultation with each CEI Participant. At this time, he will return all TRACE Units.

Schedule for Consultations

February 27 - 8:45 to 11:30 a.m. - Pine Elementary, Millville. Mr. Cooper, head teacher, will prepare schedule.

February 27 - 12:45 to 3:00 p.m. - Berwick High School
12:45 to 1:07.5 p.m. Don Saint Sing
1:07.5 to 1:30 p.m.- Dave Doebler
1:30 to 1:52.5 p.m.-Paul Klinger
1:52.5 to 2:15 p.m.- Jane Gadomiski
2:15 to 2:37.5 p.m.- Bob Nash
2:37.5 to 3:00 p.m.- Fred Eddinger

February 28 - 7:30 to 11:00 a.m. - W.W. Evans, Bloomsburg. Mr. Smethers, Principal, will prepare schedule of appointments. A floating substitute will be available.

February 28 - 1:00 to 3:00 p.m. - Berwick Jr. High School. Mr. Hauck, Principal, will arrange for appointments and class coverage.

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

MEMORANDUM:

TO: Zigmund Musial, Superintendent Millville Area Schools

FROM: Carl W. Pepperman

SUBJECT: C.E.I. Three-Day Workshop

DATE: April 4, 1974

Feedback from participants of the Career Education Institute sponsored by the Central Susquehanna Intermediate Unit has resulted in requests for the involvement of additional teachers from the participating districts. Because one of the goals of the Institute is to assist the original participants in their role as change agents within their district, The CEI Staff is anxious to meet this request. We have outlined the following method for doing this:

Each original CEI participant will identify one teacher whom he/she feels has a desire to implement the concepts of Career Education in his/her classroom.

These identified teachers will participate in a three-day In-Service Workshop to gain essential background information for such implementation. This workshop will be conducted by the CEI Staff.

Each duo will then work together toward implementation. The original CEI participant will be able to provide the details of his learning experience to assist his teammate gain a comprehensive understanding of the concept of Career Education.

A natural, internal evolvement of a comprehensive Career Education Program is the most obvious endorsement of this multiplier process.

The cost to your district for this Workshop will not exceed $262.50 for 5 people. This amount will be used to help pay substitutes to release your teachers. The remainder of the Workshop costs, meals, mileage, staff, and materials, will be provided thru the Career Education Institute.

You will be contacted soon with regard to dates and details. Please do not hesitate to contact me with any questions you may have.

cc: Terry Anspach
Ed Gerler

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

MEMORANDUM:

TO: Dr. John Magill, Superintendent, Bloomsburg

FROM: Marie Clark

SUBJECT: Three-day Career Education Institute Workshop

DATE: April 30, 1974

The following persons from your district will be attending the three-day Career Development Education workshop to be conducted at the Sheraton Inn, Danville on May 6, 7, & 8, 1974.

Name	School
Virginia Autotore	Junior High--Language Arts
John Beierschmitt	Senior High--Language Arts
Esther Dreisbach	Memorial--1st
Donald Dugan	Beaver
Julie Yerger	Junior High--Language Arts

You will recall that the Bloomsburg School District will be responsible for one-half of the substitute reimbursement cost while the CEI Project will absorb the other half.

Enclosed is a copy of the letter which was sent to all participants. If you should have any questions about the workshop, please do not hesitate to contact us.

cc: Frank Golder
Claude Regginger
Harry Gray
James Harris

LOREN L. EVES
Insurance
MILLVILLE, PA. 17846
R. D. 1

March 12, 1974

Dr. Carl Pepperman
Central Susquehanna Intermediate Unit
Post Office Box #213
Lewisburg, Penna.,
17837

Dear Dr. Pepperman:

Recently in The First National Bank, Millville, Penna., I observed Mrs. Irene Mitchel and Mrs. Arwilda Shoemaker of the Pine Elementary School, Millville School System working with a few youngsters in a Career Education Project.

They were photographing paintings on the wall of the bank depicting two hundred years of Millville history. The paintings had been placed there during our Bicentennial year in 1972.

At the time I saw this group I inquired if it would be at all possible for them to supply me with copies of the paintings and I offered to share the expense. They replied that it was quite probable.

Just recently I received four prints from Mrs. Mitchell. They are absolutely fabulous. I am so very pleased to have them and if this exemplifies the character of the work being done by your organization I thought I would like to write and tell you so and to encourage you to continue the good work.

I have received no bill, but the offer still stands.

I am mailing a copy of this letter to Mrs. Mitchell so that she and all who assisted her in this project will also know how pleased I am to have these prints.

Sincerely,

LOREN L. EVES

LLE:pgb

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

MEMORANDUM:

TO: All CEI Participants

FROM: CEI Staff

DATE: May 3, 1974

SUBJECT: A Time to Share

Monday, May 20, 1974

4:00 P.M.

Pine Barn Inn

Danville

Much has happened since we first met in December. New dimensions have been added to our professional and personal lives. In addition, twenty new people have joined the Career Education Institute and they will be starting to make their contributions at the same time you are reading this memo.

We would like to provide an opportunity for both groups of participants to come together to share your experiences and feelings and to plan your goals and strategies for next year.

We will meet at 4:00, Monday, May 20, at the Pine Barn Inn, Danville, and dinner will be served at 6:30.

We would like to make this a meaningful and informative session, so begin now to make notes on your experiences and your plans that you would like to share.

I will _____ will not _____ attend the May 20 meeting.

Choice for dinner: London broil _____ Stuffed flounder _____

NAME _____

Please return to Marie Clark at your team meeting on Friday, May 10th at 7:30 A.M.

APPENDIX E

Career Education Institute - 3rd Week

1. Announcement of 3rd week
2. CEI - 3rd Week Agenda
3. CEI - 3rd Week Worksheets

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT
P. O. BOX 213 — LEWISBURG, PENNA. 17837
717-521-4431

February 20, 1974

Memorandum

TO: CEI Participants

FROM: Kathy Gearhart

SUBJECT: Third Week of Career Education Institute

DATE: February 20, 1974

The third session of the Career Education Institute will be held the week of March 25, 1974 at the Sheraton Inn, Danville and Briar Heights, Berwick.

Due to a meeting already scheduled at the Sheraton we must meet at another location on Wednesday, March 27. We have decided to try Briar Heights to see what meeting arrangments they have to offer.

The times for the third week of the CEI will be from 8:15 A.M. to 3:00 P.M. each day - Monday through Friday.

The workshop session itself will be divided into three major areas: One day to catch up with each other, 2-3 days of human relations training, and one day of effective change agent processes. This is tentative to date, and a finalized schedule will be sent to you nearer the dates of the workshop.

If you should have any questions, don't hesitate to contact us.

bs

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

CAREER EDUCATION INSTITUTE

PHASE III

Human Relations
& Other Affective Strategies
for Effective Implementation

Agenda - March 25-29 Sheraton Inn - Danville

Monday, March 25	Getting re-acquainted; sharing in a structured discussion our own career development; learning how to "process" a discussion.
Tuesday, March 26	A look at the Human Development Program, including coverage of awareness, mastery, and social interaction "theories." Introduction of the "Magic Circle" as a vehicle for enhancing self-awareness, values clarification, decision-making, self confidence, and social interaction.
Wednesday, March 27	Magic Circle practicum exercises designed to train participants to use the circle in their classrooms. Modeling of effective leadership skills and processing techniques.
Thursday, March 28	Additional Magic Circle Practicum to provide all participants with leadership practice. Also, gaming demonstration with Market.
Friday, March 29	Specific implementation strategies utilizing the "force-field analysis" approach. Can I implement C. E.? - Will I Implement C.E.? The solicitation of individual and team commitments.

GROWTH GROUP VALUES WORKSHEET

Directions: Place a check (√) in front of those values which correspond to your own, and place an "X" in front of those which you personally reject. Then rank-order the <u>three</u> values which you hold most strongly by placing a "1" next to your highest value, a "2" next to your second most strongly held value, and a "3" next to your third value. Follow the same procedure for the three which you <u>reject</u> the most strongly: Write a "1" next to the value you reject most, etc.

It is valuable to be:

____Active	____Explorative	____Sensitive
____Ambitious	____Good	____Spontaneous
____Aware	____Helpful	____Superior
____Better	____Honest	____Supportive
____Careful	____Influential	____Sure
____Competetive	____Loyal	____Thoughtful
____Considerate	____Open	____Tolerant
____Creative	____Productive	____Trusting
____Critical	____Right	____Unique
____Different	____Risky	____Warm

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT
PUPIL PERSONNEL SERVICES
CAREER EDUCATION INSTITUTE
Box 213
Lewisburg, Penna. 17837

Directions: The list of questions below is designed to stimulate group discussion around work-related topics. The following ground rules should govern this discussion:

1. Take turns asking questions, either to specific individuals or to the group as a whole.
2. You must be willing to answer any question which you ask.
3. Any member may decline to answer any question which someone else asks.
4. Work with the person who is answering to make certain that effective two-way understanding takes place.
5. All answers remain confidential within the group.

Questions May Be Asked in Any Order

1. How do you feel about yourself in your present job?
2. What do you see as the next step in your career development?
3. What personal characteristics do you have that get in the way of your work?
4. What are you doing best right now?
5. What are you trying to get accomplished in your work?
6. Where do you see yourself ten years from now?
7. How are you perceiving me?
8. What would you predict to be my assessment of you?
9. What was your first impression of me?
10. How many different hats do you wear?
11. How do you typically behave when a deadline is approaching?
12. What kind of relationship do you want with me?
13. What things do you do best?
14. What factors in your job situation impede your goal-accomplishment?

Questions--page 2

15. Whom are you having the most difficulty with right now? (What is that person doing? What is your reaction?)

16. To whom are you closest in your work situation?

17. Where would you locate yourself on a ten-point scale of commitment to the goals of this group (1 is low, 10 is high)?

18. What part are you playing in this group?

19. How do you want to receive feedback?

20. What do you think I'm up to?

21. What puzzles you about me?

22. How are you feeling right now?

23. What issue do you think we must face together?

24. What do you see going on in the group right now?

25. What personal growth efforts are you making?

Joe Doodlebug Briefing Sheet

The Situation

Joe Doodlebug is a strange sort of imaginary bug that can and cannot do certain things. He has been jumping all over the place getting some exercise when his master places a pile of food three feet directly west of him. As soon as he sees all this food, he stops in his tracks, facing north. He notes that the pile of food is a little larger than he.

After all this exercise Joe is very hungry and wants to get the food as quickly as he can. He examines the situation and then says, "Darn it, I'll have to jump four times to get the food."

The Problem

Joe is a smart bug, and he is dead right in his conclusion. Why do you suppose Joe Doodlebug has to take four jumps, no more and no less, to reach the food?

Joe Doodlebug Briefing Sheet

The Situation

Joe Doodlebug is a strange sort of imaginary bug that can and cannot do certain things. He has been jumping all over the place getting some exercise when his master places a pile of food three feet directly west of him. As soon as he sees all this food, he stops in his tracks, facing north. He notes that the pile of food is a little larger than he.

After all this exercise Joe is very hungry and wants to get the food as quickly as he can. He examines the situation and then says, "Darn it, I'll have to jump four times to get the food."

The Problem

Joe is a smart bug, and he is dead right in his conclusion. Why do you suppose Joe Doodlebug has to take four jumps, no more and no less, to reach the food?

Problem-Solving Process Observation Form

Make notes in the blank spaces provided. Record <u>who</u> did <u>what</u>.

Organization:

How did the group get started?

How did they begin sharing their resources?

What procedures did they develop to solve the problem?

Data Flow:

How did the group get out all the information?

What data were accepted? Rejected?

How was the information collated or compiled?

Data Processing:

How did the group stay on track?

What decision rules emerged?

What visual aids were employed?

How was consensus achieved and tested?

Critiquing:

How did the group discuss its own functioning?

What climate emerged in the meeting?

APPENDIX F

Learning Centers

1. Environment Careers Learning Guide
2. Agri-business and Natural Resource Careers Learning Guide

DRAFT COPY

The protecting and saving of the natural things around us, including the repair of damage man has done. Jobs are concerned with land, water, air, and all living things.

TEACHERS GUIDE

Environmental Careers

Learning Station

Developed by the Career Education Institute under funding from the Research Coordinating Unit of the Bureau of Vocational Education. Project #19-3019

Distributed by the Career Education Services
Central Susquehanna Intermediate Unit
Box 213, Lewisburg, Penna. 17837

Introduction

Career Education in the elementary school can facilitate individual students' career development. This Environmental Careers Learning Center is designed to increase the concern of Career as outlined in the Pennsylvania Career Development Model through hands-on-activities. Awareness of what people do will form a foundation for future decision making.

Environment is just one of the 15 clusters or categories that separate the more than 30,000 existing careers into functional teaching concepts. The other 14 clusters are: Agri-business & Natural Resources, Business & Office, Communications & Media, Construction, Consumer & Homemaking, Fine Arts, Health, Hospitality & Recreation, Manufacturing, Marine Science, Marketing & Distribution, Personal Service, Public Service and Transportation.

This learning station is designed for career awareness in the upper elementary grades, and when possible a third grade reading level has been maintained. Thirty-one separate activities are included. All or any parts can be used. Activities may be integrated into existing curriculum, used as a motivational tool, or blended into contract learning experiences.

Goals

1. Each student will increase his knowledge of environmental careers.
2. Each student will increase his knowledge of environmental job duties.
3. Each student will experience success and enjoyment through completion of hands-on-activities.
4. Each student will through hands-on-activities become aware of personal likes and dislikes.

Teacher Instruction

1. Administer the pre-test. This can be read aloud if necessary.

2. Set up the learning station. You will need to supply at least one cassette player and a filmstrip projector.

3. Introduce the Learning Center with correlation to your curriculum. The words Career and Environment, if desired, could be explained at this time. Set definite dates for completion and daily working time limits.

4. Distribute envelopes for each child to file his activity sheets.

5. Have all children complete the Introduction page.

6. The remaining 31 activities may be done in any order. Depending on your time and physical limitations you may wish to schedule a certain order for efficient use of materials. Activities will consume varying times.

7. Replenish activity sheets from supply box as needed.

8. Award the badges and expert words to those earning them as instructed on student Introduction page.

9. Administer post test. Comparison of pre and post-test results with students is optional. Pre and post-test scores, grade levels, and sex are requested to be reported to the CSIU as base line information for research.

10. Evaluate the Learning Station through a written statement of strong points, weak points and recommended changes.

PRE/POST-TESTS ANSWER KEY

DIRECTIONS: In the blank, write the letter of the best answer to each of the questions.

B 1. If you want to become a chemist, you should like to (A) play baseball. (B) study math. (C) work outdoors. (D) study maps.

A 2. In most environmental careers, it is necessary to (A) get along with people. (B) enjoy math. (C) work in a lab. (D) draw maps.

B 3. To be a janitor it is important to (A) go to college. (B) be honest and friendly. (C) be able to work long hours sitting still. (D) write well.

C 4. A person who studies weather, keeps records on the weather, and looks at weather maps is probably (A) an architect. (B) an exterminator. (C) a meteorologist. (D) a civil engineer.

A 5. A meteorologist, a city planner, and an architect must be able to (A) read maps. (B) drive heavy equipment. (C) work with machines. (D) be around loud noise.

C 6. A "Pitch Pack" is often used by (A) baseball players. (B) chemist. (C) exterminators. (D) heavy equipment operators.

B 7. Graduated cyclinders and test tubes are tools used by (A) heavy equipment operators. (B) chemists. (C) game wardens. (D) surveyors.

A 8. Which of these tools would be used by a draftsman? (A) a"T-Square" (B) a "Pitch Pack" (C) a "Test Tube" (D) a "Telescope"

B 9. You do <u>not</u> have to go to college to be (A) a forester. (B) a heavy equipment operator. (C) a civil engineer. (D) an astronomer.

D 10. A person who studies the stars, planets, sun, and outer space is called (A) an architect. (B) an exterminator. (C) an environmental testor. (D) an astronomer.

A 11. You must go to college to be (A) a geologist. (B) a heavy equipment operator. (C) a janitor. (D) a water systems foreman.

D 12. Which of these people probably have the noisiest jobs?
(A) foresters (B) food and drug inspectors (C) astronomers
(D) heavy equipment operators

A 13. Which of these people probably spend most of their time outdoors?
(A) surveyors (B) draftsman (C) power plant operators
(D) chemists

C 14. Which of these people probably spend a lot of time thinking about bugs? (A) heavy equipment operators (B) architects
(C) exterminators (D) astronomers

C 15. Which of these people sometimes wear dust masks? (A) architects
(B) power plant operators (C) environmental inspectors
(D) surveyors

B 16. A heavy equipment operator, a city planner, and an exterminator must (A) go to college. (B) follow directions. (C) speak well.
(D) work indoors most of the time.

A 17. Draftsmen, architects, and surveyors must be able to (A) draw.
(B) sing. (C) fix machines. (D) work with chemicals.

C 18. Which of these people work with chemicals? (A) architects
(B) surveyors (C) exterminators (D) draftsmen

B 19. A civil engineer (A) drives trains. (B) plans highways.
(C) drives bulldozers. (D) cleans buildings.

A 20. Power plant operators spend much time (A) reading dials.
(B) working outdoors. (C) drawing maps. (D) looking at stars.

21. Do you know more about environmental careers now than you did three weeks ago? YES NO

22. If you circled "YES" on question 21, tell how it makes you feel to know more about environmental careers:

If you circled "NO" on question 21, tell how you feel not knowing any more about environmental careers:

_____

_____

_____

23. In the space below, tell what you remember best while learning about environmental careers?

_____

_____

_____

DIRECTIONS: Here is a list of careers. If the career is an environmental career, circle YES. If the career is not an environmental career, circle NO.

1. Mail Clerk	YES	(NO)
2. Baker	YES	(NO)
3. Janitor	(YES)	NO
4. Painter	YES	(NO)
5. Heavy Equipment Operator	(YES)	NO
6. Architect	(YES)	NO
7. Meteorologist	(YES)	NO
8. Cook	YES	(NO)
9. Chemist	(YES)	NO
10. Auto Mechanic	YES	(NO)
11. Beautician	YES	(NO)
12. School Bus Driver	YES	(NO)
13. Delivery Man	YES	(NO)
14. Surveyor	(YES)	NO
15. Astronomer	(YES)	NO
16. Insurance Salesman	YES	(NO)
17. Exterminator	(YES)	NO
18. Forester	(YES)	NO
19. Draftsman	(YES)	NO
20. Bookkeeper	YES	(NO)

DESCRIPTION OF ACTIVITIES

Activities are rated as High (for students able to do better then Third Grade Work) Average (students working at average Third Grade level), and Low (students working at low or below Third Grade level.) Many children reading below a Third Grade level will have some difficulty reading the material.

INTRODUCTION - All children must read this before beginning. It is a good exercise in following directions and should be completed individually. Only your low readers will have any trouble reading this.

ACTIVITY 1 - Exterminator - After the students make the pitch packs, they are instructed to take them home. You may want a few "volunteers," to place them around the school where they might suspect mice or rats live. These should then be checked for a week. If nothing happens, they may then be placed somewhere else around the school or taken home. All levels will be able to do this activity.

ACTIVITY 2 - Geologist - This will be a good one for average or above average students. If some students express interest in knowing more about what a Geologist does, it might be fun to have one visit your classroom. This would certainly be true for any of the jobs in the Environment.

ACTIVITY 3 - Forester - All levels could successfully do this one. The lower students may need some help with the sentences. You may wish to have a Dictionary handy.

ACTIVITY 4 - Urban Planner - This idea could be used later as part of a mathematics lesson. All students will have success at this.

ACTIVITY 5 - Chemist - This is one all students can do. You may want to use this idea in a science lesson, explaining further what a Chemist does.

ACTIVITY 6 - Food and Drug Inspector - All levels.

ACTIVITY 7 - Exterminator - This would be a good activity for your better students. It requires (in Step #12) locating the reason for the results found. Average students should also be able to handle this.

ACTIVITY 8 - Civil Engineer - All students.

ACTIVITY 9 - Environmental Inspector - Especially good for slower students.

(Steps 8 and 9 could be further used as the beginning of a lesson on map reading.)

ACTIVITY 10 - Game Warden - Good for all students. You may wish to encourage the students to bring in other posters like this one and make their own puzzles.

ACTIVITY 11 - Draftsman - Good for all students. The T-Square might be something you would want your students to make and use for a mathematics lesson later on.

ACTIVITY 12 - Water Systems Foreman - Excellent for slow children, especially. This may "spur" the children to take the faucet apart in your classroom. Good luck!

ACTIVITY 13 - Soil Conservationist - This may be difficult for low students because of the "Locating the Answer" skill required.

ACTIVITY 14 - Environmental Testor - Good for all students.

ACTIVITY 15 - Architect - All students. It is helpful for students to learn to use the "Yellow Pages."

ACTIVITY 16 - Exterminator - For all students.

ACTIVITY 17 - Surveyor - For all students.

ACTIVITY 18 - General - If you have access to a copy of a newspaper, you may want to use it to emphasize any of these careers in the environment. This is especially good for your better students.

ACTIVITY 19 - Astronomer - All students can do this. Students might be encouraged to make their own puzzles, using pictures and words. It would be a potential class project to have your students make small puzzles for children in Kindergarten or First Grade.

ACTIVITY 20 - General - All students.

ACTIVITY 21 - Heavy Equipment Operator - All students.

ACTIVITY 22 - Meteorologist - This may be difficult for low students due to interpreting skills.

ACTIVITY 23 - Janitor - All students. This may be slightly disruptive to the classroom.

ACTIVITY 24 - Recycling Foreman - All students.

ACTIVITY 25 - Game Warden - All students.

ACTIVITY 26 - Civil Engineer - This may be difficult for low students.

ACTIVITY 27 - Botanist - All students.

ACTIVITY 28 - Power Plant Operator - This may be difficult for low students.

ACTIVITY 29 - Naturalist - All students.

ACTIVITY 30 - Naturalist - All students.

ACTIVITY 31 - Ecologist - Especially good for low students.

Additional Activities and Ideas

1. Contact local persons to serve as role models or resource personnel for your classroom. The Resource Directory may be helpful for this purpose.

2. If children are experiences in the Human Development Program, Magic Circles could be utilized with a career emphasis. Example:

    a. Why is it important for me for know about careers.
    b. How I feel about the environment.
    c. Something I like about the environment.
    d. If I could choose working by myself or with others, I would choose_____.

3. Trips, and/or interviews with the personnel of the PP&L Montour Preserve, R. D. # 1, Turbotville, Pa. may be helpful. An extensive educational program exists there for your usage.

4. For more indepth information on specific careers contact the CSIU Career Education Services for a Teacher Resource Guide ($1.00) or copies of specific career briefs.

5. The King Feature's Popeye Environmental Careers Comic may be used. The reading level on this book is 6th grade or higher.

6. Language arts activities could include spelling words, creative writing and reports.

7. Seed planting (Botanist)--Have students bring in jars (small-baby food). Use Lima Bean seeds. Each student will plant 1 bean along the side of the jar then fill the rest of the jar with ground. A paper towel could be wet, then placed in the jar to keep the bean in place.

    Watering procedures should be reviewed. Growth Charts could be kept to determine root growth, etc. Diagrams could be made every other week to show scaled changes in the seed growth.

Contents

1. Job Box - 28 cards
2. Multiple copies of Introduction Comics
3. Activity Sheets
4. Pre & Post Tests
5. Wax Paper
6. Ground Corn
7. Pipe & fittings
8. Aluminum Pan
9. Pint jar & base
10. Hard hat
11. 2 Puzzles
12. 4 Tapes
13. Container of Wheat
14. Litmus paper
15. Faucet
16. Ruler
17. Scissors
18. Measuring Spoon
19. Filmstrip
20. Dust Mask
21. 4 Test tubes
22. Graduated cylinder
23. Test tube rack
24. 3 Phone books
25. Common Trees of Pa. Book
26. Badges
27. Scales
28. Bucket
29. Rabbit Trap
30. Seeding rate chart
31. Envelope #30 - animal tracks
32. Envelope #28 - PP&L Hourly Log
33. Envelope #26 - base map
34. Envelope #21 - dot to dot puzzles
35. Envelope #20 - blueprint
36. Envelope #10 - puzzle
37. Envelope #19 - puzzle
38. Envelope # 2 - topographical map
39. Envelope # 4 - base map
40. Pegboard & Prop
41. Teachers Manual
42. Newspaper

DRAFT COPY
1974

Remove nature's riches from the earth and using the land to raise animals and crops. Jobs with oil, trees, rocks, animals, and plants.

TEACHERS GUIDE

AGRI BUSINESS AND NATURAL RESOURCES CAREERS

Learning Station

Developed by the Career Education Institute under funding from the Research Coordinating Unit of the Bureau of Vocational Education. Project #19-3019

Distributed by the Career Education Services
Central Susquehanna Intermediate Unit
Box 213, Lewisburg, Penna. 17837

INTRODUCTION

This kit of thirty-one activities is designed to increase students' awareness of tasks involved in careers in the Agri-Business and Natural Resources career cluster. The kit was developed in an attempt to fulfill the need for career information, which is one of the concerns of the Pennsylvania Career Development Model, by providing students with hands-on activities to perform.

It is hoped that by actually experiencing a task involved in a career, students will form a basis for future career decision making.

Agri-business and natural resources is one of the 15 clusters that separate the more than 30,000 existing careers into functional teaching categories. The other 14 clusters are:

Business and Office
Communications and Media
Construction
Consumer and Homemaking
Environment
Fine Arts and Humanities
Health
Hospitality and Recreation
Manufacturing
Marine Science
Marketing and Distribution
Personal Services
Public Services
Transportation

This learning station is designed for use in the upper elementary grades, and whenever possible, a third grade reading level has been maintained. All or any part of the activities may be used. The "Description of Activities" section should help you to select single activities for specific purposes. Activities may be integrated into existing curriculum, used as a motivational tool, or blended into contracted learning experiences.

GOALS:

1. Each student will increase his/her knowledge of Agri-Business/Natural Resources careers.

2. Each student will increase his/her knowledge of Agri-Business/Natural Resources job duties.

3. Each student will experience success and enjoyment through completion of hands-on activities.

4. Each student will become aware of personal likes and dislikes through experiencing hands-on activities.

TEACHER INSTRUCTIONS

1. Administer the pre-test to the entire class, reading it aloud if necessary. All answers should be written on a separate sheet of paper.
2. Set up the learning station.
    a. Be sure the Job Box, activity sheets, and Popeye Comics, as well as the materials, are available to the children.
    b. You will need to provide a cassette tape recorder.
    c. Given the arrangement of and space available in your classroom, it is suggested that the "Dog Map of the World" be mounted on the back of the pegboard, if possible.
    d. Included in Activity #1 is a sample of medicine. Please secure this to the peg board and stress that it not be removed. Children are instructed on the activity sheet not to remove it.
3. Introduce the Learning Center with correlation to your curriculum.
    a. The words, "Career", "Agri-Business", and "Natural Resources", could be explained at this time.
    b. Set the ground rules for your classroom; i.e., number of people allowed to work

together, when the learning center is to be used, etc.

4. Have all children read the "Introduction" page in the Activity Book. This will involve your giving each child a worksheet and a "Career Cluster" envelope in which he/she will keep all worksheets and papers. Please do not allow children to write in the Activity Books.
5. Reinforce positive behavior by acknowledging accomplishments. A wallchart may be helpful.
6. Award badges and "expert" words to those earning them according to criteria in the student introduction.
7. Administer the post-test. Comparison of pre and post-test scores is optional. Pre and post-test scores, grade level and sex are requested to be reported to the CSIU as base line information for research.
8. Evaluate the Learning Center with a written statement of strong points, weak points and recommended changes. Please be candid in giving feedback. Each activity allows the child to demonstrate if he or she has been successful or an indication of feelings about the activity. This may help you in evaluating the appropriateness of the kit.

DESCRIPTION OF ACTIVITIES

ACTIVITY NUMBER	JOB TITLE	BEHAVIORAL OBJECTIVES	SKILLS INVOLVED						LEVEL OF DIFFICULTY (Average denotes 4th Grade Level.)		
			Mathematics	Language Arts	Manipulation	Decision-Making	Observation	Sequencing	Low	Average	High
1	Veterinarian	A. Students will shoot styrofoam pelletts into wastecan using a balling gun and will check whether or not they have been successful.			X				X		
10	Veterinarian	B. After reading directions, students will muzzle a dog mannequin using a piece of cloth and will check whether or not they have been successful.	an		X				X		
2	Kennel Owner	After referring to "Dog Map of the World," students will write answers to questions about dogs.		X						X	
3	Dog Breeder	After reading directions using the booklet provided, students will calculate and compare amounts of feed needed for two sizes of dogs.	X							X	
4	Breeding Technician	After reading the directions, students will inspect pictures of cows, judge if they are the same or different and check their response.					X		X		
5	Agricultural Lab Tester	After reading directions, students will test their cafeteria milk for the presence of mastitis infection and will check whether or not it was present.			X		X		X		

DESCRIPTION OF ACTIVITIES

ACTIVITY NUMBER	JOB TITLE	BEHAVIORAL OBJECTIVES	SKILLS INVOLVED						LEVEL OF DIFFICULTY (Average denotes 4th Grade Level.)		
			Mathematics	Language Arts	Manipulation	Decision-Making	Observation	Sequencing	Low	Average	High
2?	Agricultural Lab Tester	B. After reading instructions and examples, students will use a chart to convert inches of milk in a bulk tank to pounds of milk.	X							X	
6	Florist	Using booklet provided, students will decide which flowers would make an arrangement they would consider pretty and will write down the names of the flowers.				X	X		X		
7	Nurseryman	After reading directions, students will look at pictures of trees and shrubs then decide which would make the best wind break and will write down their choice.				X	X			X	
8	Agricultural Equipment Salesperson	After reading the directions for the game, students will play "Concentration" using pictures of farm equipment. Students will check whether or not this taught them the name of any equipment they didn't know before.			X	X	X		X		
9	Sawyer Milk Hauler Miller quarry worker	Students will listen to a tape recording of sounds made in a saw mill, feed mill, stone quarry and dairy farm, then will number appropriate pictures to show sequence of record.				X	X	X		X	

DESCRIPTION OF ACTIVITIES

ACTIVITY NUMBER	JOB TITLE	BEHAVIORAL OBJECTIVES	SKILLS INVOLVED						LEVEL OF DIFFICULTY (Average denotes 4th Grade Level.)		
			Mathematics	Language Arts	Manipulation	Decision-Making	Observation	Sequencing	Low	Average	High
11	Agricultural Feed Salesperson	After reading directions, students will write the names of as many of 5 seeds as they can. They will then use the booklet and samples provided to check their answers and complete or correct any they did not know.		X			X			X	
12	Dairy Farm Hand	After reading directions, students will prepare milk replacer and assemble a feed bottle for a calf, then will write a statement about their reaction.	X	X						X	
13	Poultry farm hand.	After reading directions, students will weigh eggs on an egg scale. They will tabulate results and then write answers to three questions based on their experience.	X			X				X	
14	Miller	After reading directions, students will put together a puzzle showing a miller at work, then check whether or not they could tell what the miller was doing.			X				X		
15	Farmer	After reading directions, students will open a double seam identical to seams on feed bags then check whether or not they were successful.			X				X		

DESCRIPTION OF ACTIVITIES

ACTIVITY NUMBER	JOB TITLE	BEHAVIORAL OBJECTIVES	SKILLS INVOLVED						LEVEL OF DIFFICULTY (Average denotes 4th Grade Level.)		
			Mathematics	Language Arts	Manipulation	Decision-Making	Observation	Sequencing	Low	Average	High
16	Beekeeper	A. After reading directions, students will put on an Alexander Bee Veil and write how they would feel about wearing it to work on a bee hive.		X	X						
18		B. After reading directions, students will look in a catalog of bee supplies, will write the name and address of a dealer in Pennsylvania and will write whether or not there is a dealer in their town.		X							X
20		C. After reading directions, students will examine a smoker, then check whether or not they think they would like to use the smoker and work with bees.			X				X		
28		D. After reading directions, students will assemble a Boardman feeder, then write how they would feel about using such a feeder and working with bees.		X	X				X		
17	Grain buyer	After reading directions, students will tie a miller's knot, then check whether or not they have been successful.			X		X			X	

DESCRIPTION OF ACTIVITIES

ACTIVITY NUMBER	JOB TITLE	BEHAVIORAL OBJECTIVES	SKILLS INVOLVED						LEVEL OF DIFFICULTY (Average denotes 4th Grade Level.)		
			Mathematics	Language Arts	Manipulation	Decision-Making	Observation	Sequencing	Low	Average	High
19	Sawyer	After reading directions, students will put together a puzzle showing a sawyer at work and will check whether or not they could tell what the sawyer was doing.			X				X		
21	Quarry worker	After reading directions, students will put together a puzzle showing a quarry worker at work and will check whether or not they could tell what the quarry worker was doing.			X				X		
22	Farm Equipment Operator	After reading directions, students will take apart and put together a tractor carbuerator, then will write how they would feel about working with equipment such as that.		X	X					X	
23	Crop Duster	After reading directions, students will read an airplane altimeter, then record the information from their reading.	X				X				X
24	Milk Hauler	After reading directions, students will take apart and put together the faucet and hose hook-up connecting a bulk milk tank to a tank truck. Students will then indicate whether or not they have been successful.				X				X	
25	Lumbergrader	After reading directions, students will use lumber scale to determine the number of board feet in a log.	X			X					X

DESCRIPTION OF ACTIVITIES

ACTIVITY NUMBER	JOB TITLE	BEHAVIORAL OBJECTIVES	SKILLS INVOLVED						LEVEL OF DIFFICULTY (Average denotes 4th Grade Level.)		
			Mathematics	Language Arts	Manipulation	Decision-Making	Observation	Sequencing	Low	Average	High
26	Coal Miner	After reading directions students will put on a coal miner's hat and light, then write how they would feel about being a coal miner.		X	X					X	
29	Fisherman	After reading directions, students will tie a clinch knot, then indicate whether or not they have been successful.			X		X				
30	Horse Breeder	After reading directions, students will write answers to questions about the feeding of horses using the information in the book provided.	X								X
31	Rig Builder	After reading directions, students will use a pipe wrench to assemble and take apart pieces of piping and will record how many assemblies they were able to perform.	X		X				X		

CONTENTS:

(Numbers in parenthesis indicate activity number of each item.)

1. Teacher guide.
2. 50 pre/post tests.
3. 50 Activity Books for student use.
4. 100 "Career Cluster" envelopes for students.
5. Job Box with 25 Job briefs.
6. 2 Popeye comic books.
7. Sample of 5 poluses (pills) (1).
8. Balling gun (1).
9. Container of styrofoam pelletts (1).
10. "Dog Map of the World" on roller (2).
11. Booklet, "How to feed, care for, and train your dog." (3).
12. Box of mastitis indicators (5).
13. Booklet of flower pictures (6).
14. Cassette tape (9).
15. Mannequin of dog head with rag attached to ring on mount. (10).
16. Cross-section of log (25).
17. Booklet of grain pictures and samples. (11).
18. Box #12 containing: feeding bottle, calf nipple, measuring cup, container of milk replacer powder, wooden spoon, bottle holder (12).
19. Egg grader (13).
20. Egg carton with 12 weighted plastic eggs. (13).
21. Box of seamed bag tips (15.)
22. Scissors (15).
23. Bee veil (16).
24. "1974 Bee Supplies) booklet - A. I. Root Co. (18).
25. Bee smoker can (20.)
26. Tractor carbuerator (22).

Contents (Continued)

27. Screw driver. (22)

28. Assembly from bulk milk tank and tank truck - 3 pieces; one with red tape; one with white tape, one with blue tape. (24)

29. Lumber grader's measuring stick (35)

30. Coal miner's hat. (26)

31. Coal miner's light and battery case (26)

32. Boardman feeder assembly - 1 wooden platform, 1 perforated metal cap, 1 glass jar. (28)

33. Booklet, "Know Practical Horse Feeding" (30.)

34. Box #31: 5 pieces pipe, 1 pipe wrench (31).

35. "Dari-Kool" chart of inches to pounds conversions. (27).

36. Envelope #4 - 3 pictures of cows (4)

37. Envelope #7 - Card of tree pictures (7)

38. Envelope #8 - Concentration game of 24 pictures on farm equipment (8)

39. Envelope #14 - Puzzle (14)

40. Envelope #17 - pieces of rope, a stick, and card illustrating tying of knot (17)

41. Envelope #19 - Puzzle (19)

42. Envelope #21 - Puzzle (21)

43. Envelope #29 - Pieces of rope, a stick and card illusurating tying of knot (29)

44. Envelope #11 - Card of seed samples. (11)

45. "A Child's Garden - A Guide for Parents and Teachers" (One copy for teacher's use.)

ADDITIONAL ACTIVITIES AND IDEAS

1. Contact local persons to serve as role models or resource personnel for your classroom. The CSIU Resource Directory may be helpful for this purpose.

2. Two teacher-made video-tapes relating to this cluster are available. Millville teachers made one of a visit to a dairy farm. Bloomsburg teachers made one of J. L. Dillon's greenhouses. Contact CSIU for help in locating these.

3. If the children are experienced in the Human Development Program, Magic Circles could be conducted with emphasis on these careers. Some cues might be:

   a. Why it is important for me to know about agri-business and natural resources careers.

   b. An activity I've done in this learning center I really liked.

   c. An agri-business or natural resources career I'd like to know more about.

4. Contact CSIU for more information on specific careers. Ask for copies of specific career briefs or for a "Teacher Resource Guide." ($1.00).

5. Language arts activities could include developing spelling lists, creative writing reports and projects.

6. The booklet, "A child's Garden - A Guide for Parents and Teachers" has been included for your use.

7. Activity #20 includes a smoker can for working with bees. Perhaps you could demonstrate to the class building a fire in the firebox. Directions for this:

First of all, take the bee-smoker and see that it is lighted so that it will stay lighted. Do this by selecting some material that is easy to ignite but which will hold fire. Light it and place it in the bottom of the fire chamber. Put in above the flame a material which will make plenty of smoke and burn slowly, such as rags, greasy waste, or well-dried rotten wood; give several puffs with the bellows to be sure that the fire is started, but do not use the bellows so much that a blaze is started in the smudge material. It is the smoke, not the flame, that is wanted. It is necessary to make very sure that there is enough smoldering fire in the smoker fuel so that it will not go out while one is handling the bees.

8. Farr Brothers Lumbermill in Millville which donated the lumber for activity #25, welcomes visits by children. Call Mr. Farr at least a day ahead at 458-5564.

PRE/POST-TEST

AGRI-BUSINESS AND NATURAL RESOURCES LEARNING STATION

Directions: Select the best answer to each question.
Write all answers on a separate piece of paper.

_____ 1. You would need to drive a truck to be a :

a. horse breeder

b. coal miner

c. milk hauler

d. agricultural lab tester.

_____ 2. Which of these would be used by a crop duster?

a. airplane

b. boat

c. tank truck

d. jeep

_____ 3. You would have to go to college to be a :

a. lumber grader

b. dairy farm hand

c. florist

d. veterinarian.

_____ 4. You would not have to work outside if you were a :

a. breeding technician

b. beekeeper

c. agricultural lab tester

d. quarry worker.

_____ 5. A farm equipment operator must:

a. like to work with other people

b. like to stay inside

c. know how to read well

d. know how to fix things

_____6. A nurseryman, a florist, a miller and a grain buyer all have to know a lot about:

a. how plants grow

b. horses

c. airplanes

d. using machines

_____7. A smoker and veil are used by:

a. florists

b. milk haulers

c. breeding technicians

d. beekeeper

_____8. To be a crop duster, it is important to:

a. go to college

b. know how to read dials

c. know how to make speeches

d. hear well.

_____9. An egg grader is used by:

a. a poultry farm hand

b. a kennel owner

c. a sawyer

d. a fisherman.

_____10. You will have to work where it is very noisy most of the time if you are a:

a. farmer

b. grain buyer

c. quarry worker

d. dairy farm hand

_____11. Which one is not important for an agricultural feed salesperson:

a. liking to talk to people

b. liking art

c. knowing about grain

d. knowing about animals

_____12. Which of these people often need to use charts?

a. fisherman

b. beekeeper

c. quarry worker

d. agricultural lab tester

_____13. A horse breeder:

a. works inside

b. has long vacations

c. has to know what to feed horses

d. has to stand still for a long time

_____14. A dairy farm hand:

a. takes care of calves

b. works with chickens

c. works with other people a lot of the time

d. often works in the woods

_____15. Which one of these people is most likely to work with a carbuerator?

a. florist

b. farm equipment operator

c. nurseryman

d. agricultural feed salesperson

_____16. If you want to become a fisherman you should probably like:

a. to be outside in all kinds of weather

b. to read

c. art

d. chemistry

_____17. Which tool would a rig builder probably use?

a. grader stick

b. test tube

c. pipe wrench

d. t-square

_____18. A kennel owner needs to know a lot about:

a. chickens

b. horses

c. bees

d. dogs

_____19. A person who uses scientific ways to help farmers breed their animals is called a:

a. horse breeder

b. breeding technician

c. farmer

d. poultry farm hand

_____20. A person who knows a lot about making grain into food for animals and people is a:

a. nurseryman

b. miller

c. milk nauler

d. crop duster

DIRECTIONS: Here is a list of careers. If the career is an agri-business or natural resources one, write YES before the number. If it is not an agri-business or natural resources one, write NO before the number.

_____ 21. Photographer

_____ 22. Butcher

_____ 23. Farmer

_____ 24. Crop Duster

_____ 25. Typist

_____ 26. Sawyer

_____ 27. Designer

_____ 28. Taxi Driver

_____ 29. Fruit farm foreman

_____ 30. Horse breeder

_____ 31. Fisherman

_____ 32. Barber

_____ 33. Kennel Owner

_____ 34. Nurse

_____ 35. Artist

_____ 36. Agricultural equipment salesperson

_____ 37. Teacher

_____ 38. Bus driver

_____ 39. Lumber grader

_____ 40. Quarry worker

41. Write a paragraph about the part you remember and liked best in the Agri-business and Natural Resources Learning Station: _____

APPENDIX G

3-Day Workshop

1. Career Education Institute 3-day Agenda
2. 3-day Goals
3. Unit Plan Worksheet
4. Discussion Guide

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

AGENDA

MONDAY, MAY 6,

8:15 a.m.	Introductions Career Education: What, Why, How, When
10:00 to 10:15	Coffee Break "Clusters" Career Development Model Learning Center
12:00 to 1:00	Lunch Career Education and Media People Places Processes Strategies

TUESDAY MAY 7

8:15 a.m.	Community Resources
11:30 a.m.	Findings: I saw... I learned... I felt....
12:00 to 1:00	Lunch "Market" Resources and Activities Strategies

WEDNESDAY, MAY 8

8:15 a.m.	Career Education and the Curriculum Resources and Activities
10:00 to 10:15	Coffee Break "What Can I Do?"
12:00 to 1:00	Lunch "We All Get a Chance To Talk" Conclusions and Goals

CAREER EDUCATION INSTITUTE
May 6,7,8, 1974

The goals for these three days are for participants:

1. to gain a knowledge of the concept of Career Education.
2. to support and supplement existing team efforts.
3. to develop a knowledge of methods for implementing Career Education.
4. to observe and interview people at work.
5. to acquire necessary skills for integrating Career Education concepts into existing curriculum.
6. to demonstrate a knowledge that all of the concerns in the Pennsylvania Career Development Model are a part of Career Education.
7. to increase an awareness of strategies which help identify individual differences.
8. to develop a personal commitment to the promotion of Career Education.
9. to develop an understanding of your role in a Career Education program.

UNIT PLAN WORKSHEET

1. This unit will emphasize these concerns of the C.D. Model _____ _____

2. Emphasis will be on the _____ cluster.

3. I want my students to learn - - -

4. What will students do to learn?

5. How will I know they have learned?

6. How will I provide for individual differences?

7. What careers can be introduced?

8. What materials will I use?

What is Career Education?

Why should there be Career Education?

When is Career Education to occur?

How is Career Education to occur?

Discussion Guide for 3-day Workshop Participants

I learned that I ...

I relearned that I ...

I affirmed that I ...

I reaffirmed that I ...

I demonstrated that I ...

I recognized that I ...

I was surprised that I ...

I noticed that I ...

I feel that I ...

APPENDIX H

Bureau of Employment Security Job Opening Information

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

Bureau of Employment Security

Job Opening Information

The following information has been shared with us from the four local Bureau of Employment Offices. (Berwick, Milton, Shamokin, and Sunbury) The statistics represent all available job openings for a one-year period (Dec. 1972 to Nov. 30, 1973.) This material has been arrayed into cluster groupings. Because of the overlap of some clusters, please do not consider placement in this listing as the only possible classification.

We hope that this information will be helpful to you and your students in their career education activities by adding a localization factor.

CLUSTER 4:

Agribusiness and Natural Resources

Available Job Openings
December 1972 - November 1973

		Milton	Shamokin	Sunbury	Berwick	Total
403.887	Harvest Hand	19				19
404.884	Tree Trimmer	5				5
404.887	Harvest Hand	4				4
404.887	Farm Hand, Fruit				5	5
406.884	Laborer	1				1
406.887	Nursery Worker		1	1		2
406.887	Greenhouse Worker			1	25	26
407.181	Landscape Gardener			1		1
407.883	Laborer, Golf Course				1	1
407.884	Grass Cutter	12				12
407.884	Grounds Keeper	2		2	1	5
407.887	Landscaping	2				2
407.887	Cemetery Worker			7		7
407.887	Park Worker				4	4
421.883	Farm Hand, General	1		6	2	9
525.381	Butcher, All-around		3			3
525.381	Butcher			4		4
525.887	Poultry Worker		22			22
525.887	Hog Cleaner		2			2
525.887	Deboner		12			12
525.887	Poultry Dresser			5		5
529.387	Quality Control, Tech.				1	1
529.782	Milk Plant Supervisor			1		1
529.885	Warpper, Layer				5	5
529.886	Dairy Helper				7	7
529.886	Cannery Worker			10	25	35
529.886	Production Helper				10	10
529.887	Cook Helper			1		1
939.887	Quarry Worker	3				3
939.887	Laborer		2			2
940.884	Faller				1	1
	TOTAL	49	42	39	87	217
		Milton	Shamokin	Sunbury	Berwick	Total

Business and Office

Available Job Openings
December 1972 - November 1973

		Milton	Shamokin	Sunbury	Berwick	Total
020.168	Adm. Computer Program	1				1
020.181	Programmer				1	1
020.188	Program Analyst	2			2	4
160.188	Accountant	1			4	5
160.288	Estimator				1	1
161.268	Time Study Clerk	2				2
189.168	Manager Trainee	17	3	11	3	34
189.168	Asst. Manager Trainee			1		1
201.368	Legal Secretary				8	8
201.368	Secretary	24	2	10		36
201.368	Medical Secretary			3		3
201.388	Billing Clerk			1		1
202.388	Stenographer		1	3	1	5
203.388	Clerk, Stenographer			1		1
203.588	Typist			4		4
203.588	Teletype Operator	2			1	3
204.887	Man of All Work	5				5
205.368	Personnel Clerk			1		1
207.885	Circulation Xerox Clerk	1				1
208.588	Perforator Operator	1				1
209.388	Clerk-Typist	2	4	4	16	26
209.388	Marketing Processing Clerk			1		1
209.388	Typist Computer Trainee	12				12
209.588	Clerk	7	7		8	22
209.688	Preliminary	7				7
210.388	Bookkeeper	12	12	6	10	40
210.388	Accounts Payable Clerk		1			1
211.468	Cashier	2		2	1	5
212.368	Teller	2	2	4	3	11
213.138	Supervisor Key Punch		4			4
213.382	Digital Operator	4			1	5
213.582	Keypunch Operator	3		5	9	17
213.782	Tabulating Machine Operator			1		1
215.388	Bookkeeping Mach. Operator	2		2	1	5
215.488	Payroll Clerk	3	4	2	4	13
219.368	Order Clerk		1			1
219.368	Clerk - General Office			46		46
219.388	State Work Program Trainee			4		4
219.388	Ward Clerk			1	55	56
219.388	Clerk General Office	113	5			118
219.388	Invoice Clerk			2		2
219.388	Billing Clerk			4		4
219.487	Conservation Aid				2	2
219.488	Accounting Clerk	5		1	5	11
223.388	Inventory Clerk			74		74
234.582	Addressograph Operator		1			1
	TOTAL	230	47	194	136	607
		Milton	Shamokin	Sunbury	Berwick	Total

CLUSTER 3.

Communications and Media

Available Job Openings
December 1972 - November 1973

		Milton	Shamokin	Sunbury	Berwick	Total
230.878	Messenger	1				1
231.588	Mail Clerk	1				1
232.368	Postal Clerk	2				2
235.862	Telephone Operator	1				1
237.368	Receptionist	2				2
237.368	Nurse-Receptionist		1			1
239.588	Meter Reader		1			1
651.782	Off-Set Press Printer	1				1
651.782	Pressman Helper	7				7
651.782	Crab Tree Press Assistant				6	6
822.281	Communication Service Man				2	2
979.782	Photo Copy Operator				2	2
979.886	Auxiliary Floor Helper				2	2
TOTAL		15	2	0	12	29
		Milton	Shamokin	Sunbury	Berwick	Total

CLUSTER 4.

Construction

Available Job Openings
December 1972 - November 1973

		Milton	Shamokin	Sunbury	Berwick	Total
001.281	Architectural Draftsman		1			1
005.081	Civil or Structural Engineer		2			2
017.281	Draftsman Plumbing	2				2
182.168	Construction Supt.	2				2
182.287	Quality Construccion Inspector				1	1
801.281	Filter-Tacker				15	15
804.281	Sheet Metal Worker			1		1
804.884	Assembler			14		4
804.886	Metal Fab. Shop Helper				31	31
806.781	Trailer Assembler				3	3
806.884	Screw Sun Operator	5				5
806.884	Assembler	7	14	7	60	88
806.887	Assembler			7		7
807.381	Auto Body Rep.			2	1	1
809.381	Ornamental Iron Worker		1			1
809.884	General Laborer		20			20
809.884	Assembler, Prod. Line				8	8
810.782	Union Melt Operator	4				4
810.884	Welder	14	2	3	26	45
812.884	Welder, Rep.				3	3
816.884	Hand Burner				2	2
819.381	Welder Insp. & Fitter				5	5
819.887	Welder - helper			1		1
821.281	Lineman - TV Cable	1			2	3
822.381	Lineman	4				4
822.844	Frameman				1	1
824.281	Electrician	1	3	2	8	14
827.281	El. Appl. Service Man	1	1	1		3
829.281	Installation and Service Tech.	2				2
829.281	Maintenance Electrician	1			2	3
829.887	Electrician Helper			1		1
840.781	Painter	8	1	4	2	15
840.781	Painter Carpet Installer		1			1
840.884	Painter (rough)	2				2
840.887	Laborer	1				1
840.887	Painter, helper			2		2
844.884	Concrete Finisher			1		1
844.887	Cement Mason Helper	9	2	6		17
850.388	Power Shovel Operator			1		1
850.883	Dozer Operator	2	1		8	11
850.887	Laborer	2				2

(CONTINUED ON NEXT PAGE)

Milton Shamokin Sunbury Berwick Total

CLUSTER 4. (Continued)

Construction

Available Job Openings
December 1972 - November 1973

		Milton	Shamokin	Sunbury	Berwick	Total
852.887	Laborer				4	4
860.381	Carpenter	8	14		9	31
860.781	Carpenter - Rough	2		3	4	9
860.781	Biliboard Erecter		1			1
860.887	Laborer		4			4
860.887	Carpenter's Helper	11	1	7	5	24
861.381	Bricklayer	2		2		4
861.381	Monument Setting Helper				6	6
861.884	Tile Setter Helper			2		2
861.887	Bricklayer - helper			6		6
861.887	Cement Mason Helper	2			8	10
862.281	Oil Burner Install Rep.				3	3
862.381	Pipe Fitter			1		1
862.381	Plumber	2				2
862.884	Laborer			6		6
862.887	Plumber Helper		1	4	2	7
863.884	Installation Man		1			1
863.884	Sider and Roofer		2			2
865.781	Glazier		1			1
866.381	Roofer		2	2		4
866.887	Roofer's Helper	10	2	9		21
866.887	Laborer				4	4
867.884	General Laborer		1			1
869.884	General Laborer		2	14	7	23
869.884	Fence Erector	6				6
869.887	Laborer	17		22	15	54
899.138	Maintenance Supervisor				1	1
899.281	Maintenance Man	1		3	3	7
899.381	Maintenance Man - Bldg.	1	2	3		6
899.884	Mobile Home Serviceman			2	3	5
899.887	Maintenance Man - Bldg.		44		1	45
TOTAL		130	133	133	213	649
		Milton	Shamokin	Sunbury	Berwick	Total

CLUSTER 5.

Consumer

Available Job Openings
December 1972 - November 1973

		Milton	Shamokin	Sunbury	Berwick	Total
142.081	Floral Designer	1			1	2
161.118	Time Study Observer	3				3
300.887	State Work Program Trainee		6			6
301.887	Day Worker			3		3
301.887	Day Worker		1			1
303.138	Live In Housekeeper			2		2
304.887	Man of all Work		1	3		4
304.887	Yardman	10				10
306.878	Maid			4		4
307.878	Nursemaid			1		1
307.878	Baby Sitter Cleaner	4				4
309.878	Companion			1		1
309.878	Companion	1				1
310.868	Hostess			1		1
311.878	Busboy		5	5		10
311.878	Counterman		50			50
311.878	Waitress	52	8	25	23	108
311.878	Countergirl		8			8
312.878	Bartender	6	2	7	1	16
312.878	Barmaid			1		1
313.381	Cook	18	1	7	9	35
313.131	Chef	1				1
314.381	Cook, Short Order	16	5	3	4	28
315.381	Cook, Camp				3	3
316.884	Meat Cutter	1				1
317.884	Hoagie Maker		2			2
217.884	Salad Girl	3				3
317.887	Cook's Helper	2			3	5
318.887	Dishwasher			2		2
318.887	Kitchen Helper	2	3	6	10	21
318.887	Dishwasher	28	1			29
319.138	Asst. Director Dining Service	1				1
319.884	Hot Food Packer				2	2
323.887	Houseman			2		2
324.878	Doorman			1		1
361.887	Laundry Laborer			1	2	3

(CONTINUED ON NEXT PAGE)

Milton	Shamokin	Sunbury	Berwick	Total

Consumer

Available Job Openings
December 1972 - November 1973

		Milton	Shamokin	Sunbury	Berwick	Total
363.782	Presser Machine		3		6	9
363.884	Hand Presser		4	1	6	11
363.886	Flat Work Operator				4	4
369.885	Tumbler Operator			1		1
369.887	Counter Girl				1	1
381.887	Charwoman			8		8
381.887	Attendant			2		2
381.887	Janitor		2	21	35	58
381.887	Maintenance Man		9			9
381.887	Cleaner	5	6			11
381.887	Custodian	45				45
381.887	Porter		7			7
381.884	Janitor	7	5		2	14
389.138	Supt. of Building	1				1
389.138	Asst. Dir. Physical Plant			1		1
389.887	Sexton		1	32		33
520.885	Feed Mixer	4				4
520.887	Candy Molder	1				1
521.885	Slicing Machine Operator			1		1
521.885	Millhand	1				1
524.884	Candy Coater	1				1
525.381	Slaughter Apprentice	2				2
526.781	Baker			1		1
526.781	Baker	1				1
529.132	Supervisor	1				1
529.867	Tomato Sorter	10				10
529.886	Cannery Worker	234				234
529.887	Cook's Helper		1			1
529.887	Laborer	2				2
681.885	Yarn Winder			3	34	37
681.885	Reelering Machine Operator			1		1
681.885	Warper		1			1
681.885	Quilter, Automatic		1			1
681.885	Yarn Winder	3				3
682.885	Spinner, Frame				3	3
683.280	Jacquard Loom Fixer				2	2

(CONTINUED ON NEXT PAGE)

TOTAL	Milton	Shamokin	Sunbury	Berwick	Total

CLUSTER 5. (Continued)

Consumer

Available Job Openings
December 1972 - November 1973

		Milton	Shamokin	Sunbury	Berwick	Total
683.280	Loom Fixer		2			2
683.780	Warp Hanger				1	1
683.782	Satinette Machine Helper				7	7
683.782	Weaver		8			8
683.782	Weaver Trainee	1	1			2
683.886	Magazine Filler		1	4		5
685.687	Patroller			1		1
685.885	Circular Knitter				6	6
689.685	Cloth Examiner				2	2
689.685	Wire Fabric Inspector	2				2
689.885	Quiller Operator			4		4
689.886	Quill Cleaner				13	13
689.887	Creeler			3		3
723.884	Assembler		12			12
781.381	Pattern Grader Trainee				1	1
781.484	Marker		3			3
781.687	Break Down Girl				1	1
781.687	Assorter		1			1
781.884	Spreader			2	3	5
781.884	Machine Cutter		2			2
781.887	Cloth Spreader				7	7
781.887	Cutter, Trainee			1		1
781.887	Cloth Spreader		5			5
781.887	Utility Girl		1			1
781.887	Trimmer		3			3
781.887	Bobin Cleaner		1			1
781.887	Hand Spreader		1			1
781.887	Marker		1			1
786.782	Sewing Machine Operator		44	13	50	107
787.885	Buttonholer		1			1
788.887	Cementer		3			3
789.687	Inspector		3		1	4
789.887	Shirt Folder				9	9
789.887	Garment Folder			1		1
789.887	Turner		1			1
919.887	Cleaner	3				3
TOTAL		472	219	185	241	1117
		Milton	Shamokin	Sunbury	Berwick	Total

CLUSTER 6.

Environment

Available Job Openings
December 1972 - November 1973

Milton	Shamokin	Sunbury	Berwick	Total

TOTAL

Milton Shamokin Sunbury Berwick Total

CLUSTER 7.

Fine Arts and Humanities

Available Job Openings
December 1972 - November 1973

Milton	Shamokin	Sunbury	Berwick	Total

TOTAL

Milton Shamokin Sunbury Berwick Total

CLUSTER 6.

Health

Available Job Openings
December 1972 - November 1973

		Milton	Shamokin	Sunbury	Berwick	Total
070.108	General Practitioner		3			3
074.387	Pharmacy Technician				1	1
075.128	Director of Nurses	2				2
075.378	Industrial Nurse	2				2
075.378	Nurse General Duty	1	1		3	5
079.378	P. Nurse (Licensed)	8		?	2	13
079.378	Dental Assistant		1			1
079.378	Office Assistant				3	3
323.887	Hospital Maid			2	7	9
355.878	Nurse Aide	13	12	28	4	57
355.878	Physical Theraphy	3				3
355.878	Dietery Aide	1				1
355.878	Orderly			2	6	8
TOTAL		30	17	35	26	108
		Milton	Shamokin	Sunbury	Berwick	Total

CLUSTER 9:

Hospitality and Recreation

Available Job Openings
December 1972 - November 1973

		Milton	Shamokin	Sunbury	Berwick	Total
323.887	Maid	7		10		17
342.858	Coupon Boy		1			1
342.863	Ride Operator			1		1
TOTAL		7	1	11		19
		Milton	Shamokin	Sunbury	Berwick	Total

CLUSTER 10.

Manufacturing

Available Job Openings
December 1972 - November 1973

		Milton	Shamokin	Sunbury	Berwick	Total
003.081	Electrical Engineer			1		1
003.181	Electronic Technician		1			1
007.081	Mechanical Engineer			1		1
007.181	Project Engineer			1		1
007.187	Plant Engineer			1		1
007.281	Draftsman		1	3	1	5
012.187	Manf. Engineer				1	1
012.188	Industrial Engineer		1		1	2
012.188	Time Study Engineer	4				4
012.281	Time Study Man			1		1
019.281	Quality Control Technician				1	1
022.081	Lab. Instructor	1				1
029.181	Lab Tester			11		11
029.381	Lab. Technician	10				10
033.181	Electronic Tech. Trainee	2				2
183.118	Asst. Production Manager		2			2
183.168	Gen. Floorman			2		2
250.258	Salesman (Ins.)	2				2
503.885	Metal Preparer				11	11
509.886	Laborer	11				11
519.137	Foreman			1		1
519.887	Foundry Worker	9				9
526.886	Baker Helper	1				1
534.782	Production Worker	2				2
539.132	Foreman Pulp Plant		1			1
539.782	Asst. Machine Operator		2			2
550.884	Paint Mixer (Hand)	1				1
556.885	Molding Machine Operator			3		3
559.885	Gas Systems Operator				1	1
559.885	Kettle Hand			1		1
579.885	Laborer	20				20
580.885	Cal. Machine Operator			14		14
581.885	Extractor Operator			1		1
582.138	Die Master			1		1
582.782	Dyer and Finisher Helper	5				5
582.885	Wrap Dying Vat Tender			2		2
600.280	Maintenance Man		1			1
600.280	Machinist	6	1		6	13
601.280	Tool and Die Maker		1			1
603.885	Grinder Wheel		2			2

(CONTINUED ON NEXT PAGE)

TOTAL	Milton	Shamokin	Sunbury	Berwick	Total

Manufacturing

Available Job Openings
December 1972 - November 1973

		Milton	Shamokin	Sunbury	Berwick	Total
604.380	Set Up Man	1				1
609.684	Inspector		1			1
609.884	Debarrer				1	1
609.885	Production Machine Operator		1	11	1	13
616.380	Machine Operator				10	10
617.885	Blanking Press Operator				13	13
619.281	Inspector	6				6
619.782	Plate Bending Roll Operator	2				2
619.886	Forge Helper			6		6
620.281	Auto Mechanic	14	4	11	5	34
620.381	Auto Service Sta. Mechanic				3	3
620.884	Auto Mechanic (Helper)	2		4	3	9
620.884	Auto Wrecker		1			1
622.884	Laborer	2				2
624.381	Farm Machinery Set-up Man				2	2
625.281	Small Engine Repairman	12				12
625.884	Diesel Mechanic Helper			1		1
625.281	Truck Mechanic	1				3
626.281	Number Head Specialist	1				1
628.281	Machine Mechanic	1				1
629.281	Cigar Machine Mechanic				2	2
637.281	Air Condition Mechanic				2	2
637.884	Laborer		5			5
638.131	Maintenance Foreman	1				1
638.281	Maintenance Mechanic	3	2			5
638.281	Millwright			4		4
638.281	Maintenance Mechanic				11	11
638.884	Maintenance Mech. Helper				2	2
539.281	Sewing Machine Repairman	3	4	3	2	12
639.381	Vending Machine Repairman			1		1
639.884	S. Machine Repair Helper				1	1
639.884	Bicycle Repairman		1			1
643.885	Press Tender	8				8
649.782	Cutter	1				1
660.280	Shop Hand	1				1
661.281	Pattern Maker	1				1
667.782	Defect Saw Operator	6				6
669.137	Dimension Mill Foreman			1		1
669.782	Woodworking Shophand	7		1	6	14
690.782	Stitcher	15	1	1	5	22
	TOTAL					

(CONTINUED ON NEXT PAGE)

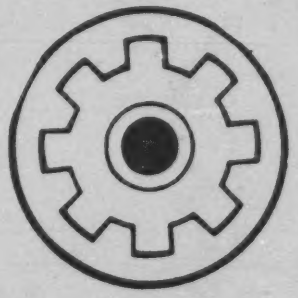
Milton	Shamokin	Sunbury	Berwick	Total

CLUSTER 10. (Continued)

Manufacturing

Available Job Openings
December 1972 - November 1973

		Milton	Shamokin	Sunbury	Berwick	Total
690.885	Famotex Operator			1		1
691.885	Winder			1		1
692.885	Machine Helper	7				7
699.138	Production Foreman				1	1
699.187	Cleaner - Oiler		2		3	5
699.782	Die Cutter			1		1
699.782	Slitting Operator				5	5
699.885	Material Stitcher				2	2
699.887	Machine Cleaner	5			5	10
705.884	Grinder	1				1
706.884	Assembler Unit			4		4
706.887	Production Assembler	10	10	1		21
711.781	Lens Grinder			2		2
713.381	Optician Apprenctice			1		1
720.281	T. V. Serviceman	1		1	1	3
723.884	Assembler				8	8
726.781	Electronics Assembler			1		1
729.884	Electronic Assemblers	50				50
730.281	Piano Technician		3			3
730.884	Production Worker		30			30
739.884	Assemblers	1				1
739.887	Gluer II			1		1
741.884	Spray Painter		2	1	1	4
741.887	Painter, Helper Spray				2	2
762.884	Assembler	352	8	4		364
763.381	Furniture Finisher		1			1
763.884	Sub-Assembler	8				8
769.887	Machine Helpers	14		5		19
769.887	Woodworking Shophans				5	5
775.884	Glass Cutter			1		1
780.381	Upholsterer	4				4
780.884	Casket Liner			2		2
780.887	Upholstery Helper	2				2
781.887	Spreader	2				2
794.801	Assembler			1		1
786.782	Sewing Machine Operator	20				20
787.782	Hemmer	7				7
787.885	Overlock Machine Operator	5				5
788.887	Laborer	21				21
789.887	Garment Folder	2				2
794.884	Box Marker		6		3	9
TOTAL		672	95	116	127	1010
		Milton	Shamokin	Sunbury	Berwick	Total



Marine Science

Available Job Openings
December 1972 - November 1973

Milton	Shamokin	Sunbury	Berwick	Total

TOTAL

Milton	Shamokin	Sunbury	Berwick	Total

CLUSTER 12.

Marketing and Distribution

Available Job Openings
December 1972 - November 1973

		Milton	Shamokin	Sunbury	Berwick	Total
162.158	Purchasing Agent			1	4	5
163.118	Crew Supervisor			1		1
163.118	Asst. Circulation Manager	1				1
185.168	Manger, Store			2	1	3
185.168	Asst. Manager Trainee		3			3
186.111	Assistant Controller	1				1
186.118	Controller		1			1
209.388	Clerk			4		4
221.168	Order Cook	1				1
221.388	Schedule Clerk	1				1
221.388	Production Clerk			1		1
222.138	Leadman	1				1
222.368	Material Expeditor	1				1
222.387	Asst. Foreman's Helper	1				1
222.387	Receiving Clerk	2		1		3
222.387	Receiving Manager				1	1
222.587	Laborer		1			1
222.587	Shipping Clerk		1		6	7
223.138	Shipping Dept. Supervisor			1		1
223.368	Purchase and Billing Clerk	1				1
223.387	Partsman		9	1		10
223.387	Expeditor	1				1
223.387	Stockroom Clerk	4			11	15
223.388	Inv. Clerk	1		5	1	7
223.684	Meat clerk, warehouse				1	1
224.487	Weigh Master	4	1	1		6
235.862	Central Office operator				6	6
237.368	Receptionist			2	1	3
240.368	Bill collector		3	1	3	7
242.368	Desk Clerk	5				5
250.258	Insurance Salesman		3		4	7
250.258	Insurance Agent		1			1
260.458	Salesgirl			1		1
263.358	Shoe Clerk			3		3
263.458	Salesperson		4	5	6	15
266.358	Salesperson		1			1
274.358	Salesperson, Furniture			1		1
276.358	Salesperson				2	2
276.358	Paint Salesman		3	2		5
276.358	Hardware Salesman		1			1
276.358	Salesman	2				2
278.358	Salesman		1			1
278.358	Salesman, Radio and T.V. parts			2		2
280.358	Salesperson, Cars			1		1
280.358	Salesman		1			1
280.458	Sales, auto accessories				3	3
	TOTAL					

(CONTINUED ON NEXT PAGE)

Milton	Shamokin	Sunbury	Berwick	Total

Marketing and Distribution

Available Job Openings
December 1972 - November 1973

		Milton	Shamokin	Sunbury	Berwick	Total
280.458	Salesperson			1		1
283.358	Salesperson, Jewelry				3	3
286.358	Salesperson		1			1
289.358	Counter man			2		2
289.358	Salesman and Estimator		1			1
289.358	Clerk	5	1	1		7
289.458	Salesman - Gen.	4	3	31	14	52
290.468	Sales Clerk				5	5
290.478	Sales Clerk	14	16		7	37
290.887	Food Salesperson			2		2
292.358	Salesman Driver	7	8	9	7	31
292.483	Coin Vending Service	2				2
293.358	Telephone Salutator		6	2	5	13
299.138	Manager, Jewelry Dept.			7		7
299.381	Carpet Layer			1		1
299.468	Cashier Checker	2	12	2	5	21
299.478	Delivery Boy	1		1		2
299.887	Sample Distributor	13	10		12	35
299.887	Carpet Layer Helper		1			1
920.885	Packager, Machine			1		1
920.885	Bottler		1			1
920.885	Bottling Shop		3			3
920.885	Packager	13	4			17
920.887	Meat Packager			1	30	31
920.887	Bottle Machine Operator			1		1
920.887	Packager		4	11		16
920.887	Marker II		3			3
921.883	Overhead Crane Operator			2	1	3
921.883	Overhead Crane Operator	5			5	
921.887	Packager		1			1
922.138	Dock Checker				2	2
922.883	Forklift Operator	8			3	11
922.887	Floor Boy	15				15
922.887	Order Filler		6			6
922.887	Warehouseman		2	8		10
922.887	Laborer		3	8		11
922.887	Sorter			10		10
922.887	Locker Plant Att.				37	37
929.137	Yardman				1	1
929.883	Front Loader Operator				7	7
929.886	Laborer, Bakery				7	7
929.887	Material Handler		14	92		106
929.887	Floor Walker		5			5
929.887	Utility Clerk		1			1
929.887	Laborer	3			113	116
929.887	Floorboy	27	6			33
929.887	Warehouseman	14				14
TOTAL		160	146	229	314	849
		Milton	Shamokin	Sunbury	Berwick	Total

Personal Service

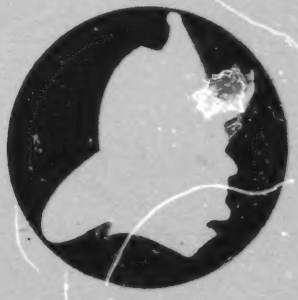
Available Job Openings
December 1972 - November 1973

		Milton	Shamokin	Sunbury	Berwick	Total
332.271	Beautician			1		1
353.368	Guide	4		1		5
359.878	Daycare Center Worker	2				2
TOTAL		6	0	2	0	8
		Milton	Shamokin	Sunbury	Berwick	Total

Public Service

Available Job Openings
December 1972 - November 1973

		Milton	Shamokin	Sunbury	Berwick	Total
090.228	Inst. Computer Science	1				1
090.288	Lecturer	1				1
091.228	Teacher, Industrial Arts			2		2
094.228	Teacher, Handicapped Children		1			1
097.228	Instructor - Food Service		1			1
099.368	Teacher Aide			2		2
100.288	Acquisitions Assistant	1				1
100.288	Acquisition Assistant		1			1
100.388	Catalog Assistant	1				1
100.388	Catalog Clerk	2				2
166.118	Personnel Manager			1		1
168.168	Assistant Manager	1			1	2
169.168	Service Representative		4			4
169.188	Underwriter Ins.	1				1
187.118	Director Community Organization		1			1
187.118	Coordinator		1			1
187.138	House Parents	4				4
187.168	Fountain Manager	5			3	8
187.168	Restaurant Manager		1			1
187.168	Program Director		1			1
187.168	Assistant Manager			1		1
195.108	Human Service Aide			1		1
249.368	Service Rep.				7	7
249.368	Library Researcher		1			1
249.368	Periodical Clerk		2			2
249.268	Survey Worker	3	2	4	3	12
359.878	Teacher Aide			1		1
371.868	Security Guard	22		8	17	47
372.868	Watchman	2	4			6
372.868	Flagman	5				5
375.138	Desk Sgt.			3		3
376.868	House Officer		1			1
379.868	Life Guard			1		1
950.782	Fireman		1	2		2
951.885	Fireman		1	2		2
952.782	Power House operator	2				2
955.782	Sewage Plant Operator	2				2
955.887	Sewage Disposal Worker				2	2
955.887	Snow Shoveler	5				5
959.884	Tree Trimmer		4	3		7
	TOTAL	58	27	29	33	147
		Milton	Shamokin	Sunbury	Berwick	Total



Transportation

Available Job Openings
December 1972 - November 1973

		Milton	Shamokin	Sunbury	Berwick	Total
021.084	Astronomy Lab. Assistant	1				1
900.883	Cement Truck Driver		2		2	4
902.883	Euclid Driver	2				2
902.883	Dump Truck Driver			4		4
902.884	Dump Truck Driver	10	4		3	17
903.883	Delivery Truck Driver	1				1
903.883	Tank Truck Driver			1	1	2
904.883	T. Trailer Driver	19	9	13	15	56
905.883	Del. Truck Driver	17		20		37
905.883	Truck Driver Helper		15	2		17
905.883	Truck Driver				18	18
906.883	Truck Driver	2	5	2	4	13
906.883	Delivery Man		2			2
909.128	Safety Supervisor				1	1
909.883	Trailer Service and Hook up				1	1
909.883	Garbage Collector			1		1
909.887	Furniture Mover	11	4			15
910.137	Traffic Man	2				2
913.381	Chauffeur			2		2
913.463	School Bus Driver	2	3	3	4	12
915.867	S. Station Attendant	13	10	6	1	30
915.884	Tire Repairer	1		1	5	7
915.887	Steam Cleaner	1				1
915.887	Lubrication man		1			1
919.168	Dispatcher	1				1
919.368	Ticket Agent			1		1
919.883	Delivery Man	3		1	1	5
919.887	Car Cleaner		1	17	2	20
TOTAL		86	57	74	58	275
		Milton	Shamokin	Sunbury	Berwick	Total

APPENDIX 1

1. Advisory Committee Memo

2. Advisory Committee Handout

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT
CAREER EDUCATION INSTITUTE
Box 213
Lewisburg, Penna. 17837
717-524-4431

MEMORANDUM:

TO: Career Education Institute Participants

FROM: CEI staff

SUBJECT: Advisory Committee Report

DATE: December 28, 1973

I want to express my appreciation to Dr. Ronald M. Frye, Director of the Career Education project at Cashmere, Washington for sharing this booklet with us. We think it contains many useful ideas to help you as you begin the task of developing career education plans for your school.

It seems that almost everything we do must involve a committee. Consequently, (it sometimes appears) we don't expect much from committees; indeed, it's almost as though we regard them as a "necessary evil," and really not necessary at all.

Yet, the comprehensiveness of this movement termed "career education" speaks loud and clear to the need for advice and counsel from the widest of constituencies, including our student consumers. If ever we needed an advisory committee to help us chart a course in developing a program, we certainly have such a need confronting us now.

With this in mind, we offer this booklet for your consideration in establishing an advisory committee for your Career Education program. For those of you who have already had experience in the use of an advisory committee, we apologize for the redundancy and trust that you too may find something helpful in the booklet.

CWP:kag

Advisory Committee for Career Education

career education project

cashmere wa.
peshastin - dryden wa.

Return Address:

_____

_____

_____

CAREER EDUCATION PROJECT
Cashmere, Peshastin-Drydon
210 So. Division
Cashmere, Wash. 98815

I would like to visit the Career Education Project.

on (date) ..... Number of persons visiting: .....

Grade level you would like to visit .....

I would like further information on the Career Education Project

Specify type of information desired.

_____

_____

_____

Name of Person making request: .....

Position: ..... Address: .....

Phone: .....

INTRODUCTION

Career Education will only be successful if educators can and will bring themselves to work with Agriculture, Business, Labor, and Government. Educators alone do not have all of the answers to problems encountered in education, but the solutions to problems of youth might be found through cooperative and concentrated efforts.

The purpose of this booklet is to assist educators in establishing those cooperative efforts. Plus, the booklet is intended to encourage and assist educators and school administrators to organize advisory committees and to provide general guidelines for effective utilization of these committees.

The principal contributor to this booklet was Mr. Robert Griffith, Director of Vocational Education at the Cashmere Public Schools. Other persons involved in the compilation were:

Richard D. Johnson	Superintendent of Schools
Dr. Ronald M. Frye	Director of Career Education
Bernadette Griffith	Curriculum Coordinator, Career Education
James W. Crook	Guidance Coordinator, Career Education

FOREWARD

ADVISORY COMMITTEES CAN CONTRIBUTE TO THE SUCCESS OF CAREER EDUCATION PROGRAMS.

WITH THE RAPID INCREASE IN TECHNOLOGICAL KNOWLEDGE AND CHANGE, IT IS IMPORTANT FOR EDUCATORS TO BE COGNIZANT OF THESE DEVELOPMENTS AND CHANGES.

ADVISORY COMMITTEES, WITH THEIR REPRESENTATION FROM LABOR AND MANAGEMENT, CAN PROVIDE THE INFORMATION AND GUIDANCE NEEDED TO KEEP TRAINING PROGRAMS CURRENT.

The primary purpose of this guide is to encourage and help school administrators to organize advisory committees and to provide general guidelines for their effective utilization.

DEFINITION OF ADVISORY COMMITTEE

The advisory committee is a group of persons outside the educational profession, made up of representative laymen who advise and assist educational personnel in the building of a sound career education program.

The project presented or reported herein was performed pursuant to a grant from the U. S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U. S. Office of Education, and no official endorsement of the U. S. Office of Education should be inferred.

Grant No. OEG-0-73-2988

Project No. V-361031L

TABLE OF CONTENTS

	Page
Why the Need for an Advisory Committee?	1
Functions of the Advisory Committee	2
Selection of Advisory Committee	3
The First Meeting	3-4
Subsequent Advisory Committee Meetings	4
How to Prepare for a Discussion	4
Suggestions for Leading a Discussion	4-5
Chairman's Responsibilities	5
School Representative's Responsibilities	5-6
Conclusion	7
Appendix A	8
Appendix B	9
Reference Materials	10

WHY THE NEED FOR AN ADVISORY COMMITTEE?

Assisting young people to understand qualification and requirements in career fields requires the best cooperative efforts of the school and the community. In order to meet its responsibility, the school must know what the people need and want. The community should know what the school is doing and is capable of doing.

It is also necessary for the school to know what jobs are available and how they can best give students knowledge of these jobs. There must be a two-way system of understanding and communication between agriculture, business, labor, industry, and education in order to keep the program realistic and to meet changing needs. Today, more than ever before, education and outside agencies must work as a team and share the responsibility for training the work force vital to the nation's economy. There are several reasons for having an advisory committee:

1. They offer support and advice on policies from a layman's point of view.

2. They provide advice that is not easily obtainable elsewhere.

3. They have important public relations potential.

4. They assist educators on up-to-date occurances in the agricultural, business, labor, and governmental areas.

FUNCTIONS OF THE ADVISORY COMMITTEE:

The general function of the committee is to act in an advisory capacity for the development of the career education program. The advisory committee should advise the school administration on such things as types of employees they are seeking; availability of openings in various fields; long-range projections in occupational areas; general and specific attitudes for employees; awareness of how disciplines can relate to occupation; ideas on how teachers can incorporate or simulate careers into subjects and to contribute current information about the world of work and the worth of work.

Other than the above mentioned functions, advisory committees often perform the following:

1. Advise as to adequacy and appropriateness of facilities and equipment.

2. Assist teachers in relating their instruction to the needs of the community.

3. Recommend criteria for the evaluation of programs.

4. Assist in development of a good public relations program.

5. Assist teachers by making suggestions on ways to include careers in the curriculum.

SELECTION OF ADVISORY COMMITTEE MEMBERS

Criteria for selection of committee members:

1. Interest
2. Character and integrity
3. Ability to express and willingness to defend their convictions without attempting to dominate discussion.
4. Willingness to work and donate their time.

Committee members should be composed of:

1. Parents
2. Businessmen (both employers and employees)
3. Both men and women
4. Students currently enrolled in school (to express their views)
5. School district member

NOTE: Be sure to get a good cross-section of owners, managers, employees. Take precautions to insure that organized labor and management receive equal representation.

About seven (7) to nine (9) members make a good sized committee.

THE FIRST MEETING

The initial meeting is extremely critical as far as maintaining the interest and continued support of the committee members. If the first meeting is well conducted, the new members are well informed by the school, and a degree of rapport is established, continued participation will probably be forthcoming. The following checklist will assist the responsible person in his preparations for the first meeting:

1. Inform each member of the date, time, and place of the meeting several days in advance.
2. Send invitation to school administration.
3. Prepare agenda for the meeting. (Orientation of the members is the main objective).
   Suggested Agenda:
   a. Welcome and remarks by the chief school administrator.
   b. Introduction of the members
   c. Nature and objectives of the school and the specific program.

d. Organization of the committee.
e. Other business -- questions from participants.
f. Set date for the next meeting.
g. Adjournment

4. Start and adjourn on time.
5. Arrange for refreshments.
6. Make a friendly phone call to the committee members and thank them for attending.

NOTE: There is no generally accepted policy regarding the number of meetings to be held. A committee working to build a worthwhile program must meet often and regularly in order to carry out its assignment. When committees are assembled to deal with short-term projects, the frequency of the meetings should be arrived at accordingly.

SUBSEQUENT ADVISORY COMMITTEE MEETINGS

The following guidelines will be of assistance in conducting advisory committee meetings:

1. Start and stop on time.
2. Follow the agenda:
   a. See that all pertinent information is presented.
   b. Allow for discussion and questions.
   c. Summarize when necessary.
   d. Get group decision.

The following information may also be of help in conducting meetings:

"How to Prepare for a Discussion"

1. Have your program or purpose organized.
2. Breakdown and list the basic topic points.
3. Analyze questions to be discussed.
4. List important discussion questions.
5. Check room for comfortable temperature and lighting.
6. Place chairs around table informally and in conference style.
7. Arrange for pencils and note pads for each person.

"Suggestions for Leading a Discussion"

1. Set the stage.
   a. Create an informal atmosphere and put the group at ease.
   b. State and clarify the questions, problem care or issue.
   c. Arouse interest; advance a question of the analytical or comparative type.

2. Direct the discussion.
   a. Ask and redirect questions. Keep the discussion moving in a developmental direction.
   b. Indicate points of agreement and disagreement.
   c. Give appropriate credit for all worthy relevant ideas.
   d. Encourage exploration and new suggestions.
   e. Summarize discussions when they are fully developed and call attention to unexplored viewpoints.

THE CHAIRMAN'S RESPONSIBILITIES

The chairman's conduct at advisory committee meetings will, to a large extent, determine the effectiveness of the committee. He will, of course, delegate many of his duties to the secretary or other members of the committee, but he is still responsible for the following functions:

1. Establish meeting dates and calling the committee members.
2. Planning committee functions.
3. Preparing a suitable agenda.
4. Providing background information as necessary.
5. Presiding at meetings.
6. Undertaking necessary follow-ups.
7. Providing reports as required.
8. Maintaining necessary personnel contacts with members.
9. Assuring that physical needs are cared for.

Advisory committee members will show the greatest continued interest and participation in school projects when:

1. Their advice is sought frequently but not unnecessarily.
2. Their former suggestions have been used by the school administration.
3. Democratic procedures have been used in committee meetings.
4. Due credit is given them by having their names printed in the various publications and news releases.
5. The school representative keeps them informed of the progress of each phase of the program.

THE SCHOOL REPRESENTATIVE'S RESPONSIBILITIES

Since the advisory committee, in most cases, will depend upon the school representative to guide its operation, the school representative will want to consider the following items:

1. Respect the committee's limited time.
2. Be prompt in the preparation of records (such as minutes of the meetings, etc.)
3. Do not underestimate the intelligence of the committee members or their interest in educational matters.
4. It is inadvisable ever to permit committees to become administrative in their functions. Seek a consensus, never a vote.
5. The school representative should never usurp the functions of the advisory committee by such actions as:

   a. Initiating programs without consulting the advisory committee.
   b. Taking action within the realm of the designated functions of the advisory committee without first consulting the committee.
   c. Failing to inform the committee of facts pertaining to the program.

6. Do not set too broad a scope of objectives for the advisory committee, or allow the committee to deviate too far from their original objectives.
7. Use of privileged information by the committee members for their own benefit or profit must be avoided.
8. Do not ignore the committee's recommendations. If their suggestions are sound, appropriate action should be taken as soon as possible. If the proposals are not adopted by the school, committee members should be told why.

The techniques used by the school representative will be influenced by many factors and will need to be changed to fit the personnel of the committee and local conditions. It is hoped that the various techniques indicated here will help school representatives adopt sound methods of effectively working with advisory committees.

CONCLUSION

Career education depends on community involvement. Its activities project out of the classroom and into the community. Community resources -- people, places, and things -- are both content and methods of instruction. They are essential to program success. And while the specific resources of communities vary, each is rich in its own unique way.

Because career education has not yet been tightly defined, there is opportunity to tailor programs to the widely different community circumstances. The programs that develop should have objectives broader than just filling manpower needs and providing students with salable skills. They can be the avenue through which students find a successful and satisfying future. They can be the door that lets the community know what goes on in school. They can be the key to community support for educatin.

APPENDIX A

SAMPLE APPOINTMENT LETTER MAILED TO ALL COMMUNITY ADVISORY COMMITTEE MEMBERS

School Letterhead

Date

Mr. Name Jones
Skyview Drive
Cashmere, WA 98815

Dear Mr. Jones:

I wish to extend my thanks and appreciation and that of the administration to you for agreeing to serve as a member of the Career Education Community Advisory Committee.

The advice and assistance given by people, such as yourself, can help teachers to help students. Through interested citizens such as you it is possible for educators to provide the young people of Cashmere and Peshastin-Dryden Schools educational opportunities which will be of greatest benefit to them.

May we thank you again for your consideration to assist the schools in this advisory capacity. We hope that you will find your association with career education both pleasant and rewarding.

Our first meeting will be held in the Board Room, Cashmere Administration Building, at 7:30 P.M., Wednesday, August 29, 1973. We are looking forward to seeing you then.

Sincerely,

Project Director, Career Education
Cashmere, Peshastin-Dryden Schools

or

Superintendent of Schools
Cashmere, Peshastin-Dryden Schools

ABC:de
Enclosure

APPENDIX B

SAMPLE AGENDA FOR FIRST MEETING

AGENDA
CAREER EDUCATION
COMMUNITY ADVISORY COMMITTEE

Wednesday, August 29, 1973

1. 7:30 P.M. Meeting Called to Order . . . Chairman
2. Intorduction of Members and Staff . . . Chairman
3. Report by Staff on Career Education

   Administrative . . . . . Director
   Guidance . . . . . Guidance Director
   Curriculum . . . . . Curriculum Director

4. Discussion and Explanation of Career Education
5. Discussion of Responsibilities of Advisory Committee Members
6. Report of Tentative Plans - (Time Line)
7. Election of Officers
8. Other Business
9. Date of Next Meeting
10. Adjournment

REFERENCE MATERIAL

Advisory Committee, Arizona State Department of Vocational Education.

The Advisory Committee, Coordinating Council for Occupational Education, State of Washington.

Involving the Community in Career Education, Center for Occupational Education, North Carolina State University at Raleigh.

APPENDIX J

Career Education Update

1. Spring 1974 issue
2. Summer 1974 issue

CAREER UPDATE EDUCATION

Career Education Service
Central Susquehanna Intermediate Unit
Box 213, Lewisburg, Penna. 17837

VOL. I NO.I SPRING-1974

introducing...

"Career Education Update," represents the C.S.I.U.'s attempt to bring to our area's interested educators news about Career Education.

The news letter will be published several times annually and will include short articles and notices relating to Career Education in the C.S.I.U. and across the country.

We hope you will add to our efforts by letting us know what you are doing with Career Education in your school.

This first issue on the work being done by the participants in the Career Education Institute, a project developed in the C.S.I.U. and supported by a grant from the Research coordinating unit of the Pennsylvania Department of Education's Bureau of Vocational Education.

Special "Thanks" are due the CEI Team from the Millville Elementary School for their urging to initiate this news letter.

cei

Four teams, consisting of four teachers, a counselor and an aide from one building have experienced a total of three weeks of training in Career Education. From now until the end of the school year is the prime time for these enthusiastic four change agent teams to implement their ideas.

CEI TEAMS

Senior High School, Berwick
- Dave Dobler
- Jane Gadomski
- Fred Eddinger
- Paul Klinger
- Robert Nash

Third Street Junior High School, Berwick
- Connie Algatt
- Earl Blake
- Diane Butera
- Ernie Cole
- Steve Kundrat
- Jim Ross
- Bob Yeager

W.W. Evans Elementary, Bloomsburg
- Margaret Hartman
- Shirley Kressler
- Anne Javsicas
- Sue Skiptunas
- Ginny Ryan
- Betty Underwood

Pine Elementary, Millville
- Dave Cooper
- Ed Gerler
- Gloria Lizardi
- Irene Mitchell
- Karen Rosenberg
- Arwilda Shoemaker

A covered dish supper followed by a Career Program was presented by the Hillville C.E.I. Team for parents and the community of the schools monthly Improvement Club Meeting. (P.T.A.)

Betty Underwood in working with remedial reading students with a TRACE Unit focusing on Transportation. She has blended a behavior contract and HDP with the basic unit. An assembly line was featured in a cutting of pictures project. Job assignments included Trimmer, Inspector, Scrap Collectors, etc.

As part of their unit on sound, the Ninth Grade Science Class of Diane Butera is producing and taping a play which has been written and directed by students in a Seventh Grade English Class.

Paul Klinger and Jane Gadomski are evaluating recently purchased Career Ed. materials in the Berwick District. They plan to disseminate these materials for experimental classroom use.

Bob Yeager has used the Simulation Game, A Nation Divided, with his Eighth Grade classes. He reports the game successful in helping students utilize decision-making processes.

Third grade pupils' parents receive letters from Arwilda Shoemaker each fall indicating an interest in them as people. A request is included for resource help in areas of hobbies, careers, transportation, and chaperonage.

Packets of pictures and information are being collected on each of the 15 Clusters by Gloria Lizardi.

Dave Cooper has found the Career Information Service of Cluster Packets to be received very well by 5th Graders.

The first TRACE Unit to be implemented was about the Solar System done by Karen Rosenberg within the Science Curriculum.

The simulation game of "Market" has been played by 3rd Graders in Arwilda Shoemakers' class. She has a video-tape of the action.

"Circles" are rapidly becoming an integral part of Junior High Classes at the Third Street Junior High School. The team is preparing a schedule so as many students as possible will be able to have this experience.

Steve Kundrat and Jane Gadomski are both utilizing additional district teachers to help implement their TRACES. Steve is working with a Social Studies teacher to increase Career Information available to these students. Jane is working with an English teacher and using newspapers from various states to compare regional job opportunities.

First graders are meeting the community through field trips and resource persons in Shirley Kresslers' class. A Career Corps is established with badges and achievement stars.

During a recent half-day inservice program, The Berwick Senior High School faculty participated in some HDP techniques designed to help students become more aware of their values and their interests in careers.

During a 2nd Grade friendly letter lesson, am impromptu career project was done by Irene Mitchell. A postal system was organized and children mailed and delivered mail in towns and rural routes all within the classroom. Careers discussed included Construction Workers, Janitors, P. O. Drivers, Mail Sorters, etc.

Would you like to buy some "Dream Cream?" It turns Devils into Angels, say the fifth graders under Anne Javsicas, who are advertizers for this class produced product. They produced their own video-tape for publicity.

Bob Nash has been implementing his TRACE. His classes mass-produced bird-feeders and individually made candle-holders or other crafts. Students related their feelings of being in an assembly line and of being creative.

The Berwick School Board publishes a monthly newspaper and the teams are going to contribute to this paper to help keep the community informed on Career Education.

ideas

From Anne Javsicas is shared the SRA Test for 4th, 5th, and 6th Graders entitled "What I Like To Do". She sees this as a self-awareness activity.

To mount those pictures of people at work or leisure on Construction paper, Arwilda Shoemaker finds a mixture of 2/3 Elmers Glue and 1/3 hot water can be applied with a sponge effectively.

changes

Team meetings

EQA Goal 8 is now meaningful

TRACE Units are being implemented

Goals are being stated at meetings

Mastery and recycling are common words

Plans

The Berwick Junior High Team is making plans to write an interdisciplinary unit incorporating Career Education concepts. This unit will help pave the way for the team-teaching approach to be implemented next year in the Junior High School.

Ed Gerler is seeking funds for further CE Curriculum development.

Shirley Kressler is developing a CE Set of Alphabet Slides.

Steve Kundrat is correlating the Community Resource Guide for Berwick.

Connie Algatt will be working with the Junior High Librarian to compile sources of free and inexpensive Career materials for the Library.

Ginny Ryan is correlating Resource Directory Information for Bloomsburg.

A task group is refining the Environment learning station.

The Berwick Junior High Team is planning a program to present to interested Junior High School teachers in the District. This program will enable the team to share their experiences of the Career Education Institute by using some of the techniques they have learned.

Local news articles are being written to put in the Berwick Enterprise to inform the community of the upcoming Community Resource Guide. The articles will include requests for volunteers to contribute information to the Guide.

sharing

Video-Tape of Pen Col Dairy
Video-Tape of Flight Instructor
Video-Tape of Bank
Slides of Pen Col Dairy
To borrow, contact Ed Gerler, Millville

8MM film of Dillions, Inc.
35MM slides of Dillions, Inc.
To borrow, contact Anne Javsicas, Bloomsburg

Video-Tape of Forge and Fabricating Co.
To borrow, contact Jane Gadomski, Berwick

Filmstrips for each Cluster
To borrow, contact CEI Staff

What has four wheels and flies from place to place distributing career information? Answer: the "Porta-Cluster Career Cart," a mobile means of bringing source material to students. The brainchild of James Bowman, CE Counselor in the Eau Claire, Wisconsin, high schools, the cart contains both printed and AV materials, plus such basic aids as Occupational Outlook Handbook, The Wisconsin Vocational-Technical Career Education Directory, and Lovejoy's College Guide.

Part of the credit also goes to the district's maintenance men, who got involved by constructing the carts according to Bowman's specifications. To date, eight porta-clusters are rolling back and forth between media centers, libraries, guidance offices, subject-oriented resource centers, and classrooms. One of the device's advantages is that contents may be used as a complete set, or on an item-by-item basis. For example, a part of a class might be watching a filmstrip, while individual members are reading pamphlets or listening to an audio-tape.

Write for further details of the Porta-Cluster Carts to George C. Meyers, Administrative Assistant, Personnel and Public Information, Eau Claire Public Schools, Wisconsin

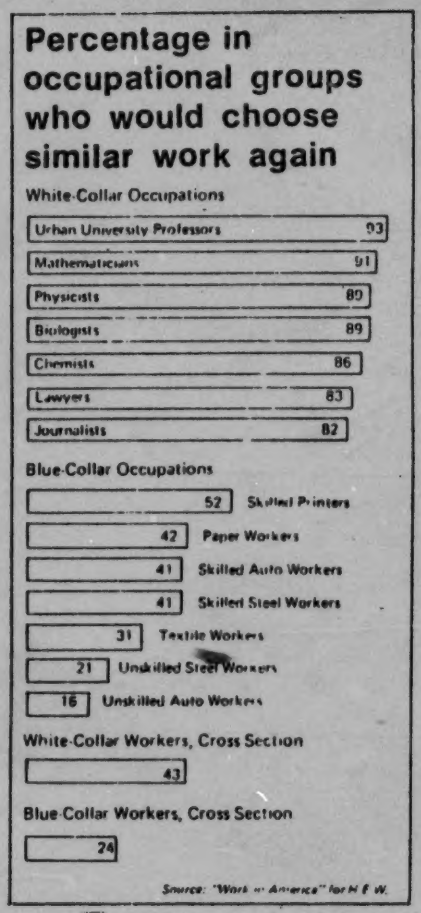
(Career Education News)

The average 20-year-old man will change jobs six times in his lifetime.

He might even make seven job changes. At that rate, he could spend 5 1/2 years on each job until he's 65.

Chances are he'll make two job changes between age 20 and 25.

Job changes are common. These are the findings of the U.S. Department of Labor.



Career Education Update welcomes contributions from area readers. Sent to:

Pupil Personnel Services
C. S. I. U. #16
Lewisburg, Penna. 17837
Telephone - 524-4431

"An excellent plumber is infinitely more admirable than an incompetent philosopher. The society which scornes excellence in plumbing because plumbing is a humble activity, and tolerates shoddiness in philosophy because it is an exaulted activity will have neither good plumbing nor good philosophy. Neither its pipes nor its theories will hold water."

John Gardner

CAREER UPDATE EDUCATION

VOL.I NO.II. SUMMER-1974

Career Education Service
Central Susquehanna Intermediate Unit
Box 213, Lewisburg, Penna. 17837

SUMMERTIME-CAREER AWARENESS

Many of us will be engaged in different activities for the upcoming season. Merely being aware of people, places, and process during this time can be a creative learning experience as well as being a resource bank of information for next year's career education classroom experiences.

Whether engaged in leisure or work, put on your "Career Ed Glasses", and see the careers around you.

career education institute

Requests from participants in the original Career Education Institute resulted in a three-day workshop, in May, involving additional teachers from the participating schools.

These teachers were provided with the basic background information needed to implement concepts of Career Education in their classrooms.

Each of these teachers was identified by one of the original CEI members, who will be able to provide the details of his/her three-week experience to assist his/her teammate gain a comprehensive understanding of the concept of Career Education.

The following participated in this Workshop:

BERWICK

Ann Brandt	Dan Ravina
Gloria Ermish	Bob Samsel
Miriam Eyer	Andrew Soback
Donna Kotansky	Bob Zalonis
Nelson Learn	

BLOOMSBURG

Virginia Autotore	Donald Dugan
John Beierschmitt	Julie Yerger
Esther Dreisbach	

MILLVILLE

Maxine Arnow	Dan Reese
Chuck Burke	Simone Taylor
Bob Doucette	

The Career Resource Directory is still in need of many more entries. Diane Butera will be correlating this publication and may be contacted at the I.U. for further information.

* * * * * *

TRACES are currently being edited and an edition will be forwarded to participants by next fall.

* * * * * *

Although the CEI project is drawing to a close, the staff hopes to serve district needs to the best of their ability within existing funding perimeters.

* * * * * *

On May 20th, participants plus staff and guests from PDE joined in a sharing of CE experiences at the Pine Barn Inn, followed by a dinner. Some of the experiences discussed included:

"If I only knew about C.E. two or three years ago, I really could have used it in my Business Education classes" was the comment made by Bob Samsel. Among Bob's plans for implementing C.E. are to use pamphlets containing current career information on his Senior High Bulletin Boards.

Donna Kotansky has been working with both the Spanish and French students on the exchange of Career Education ideas.

A unit on Transportation careers was implemented by Betty Underwood with a group of 4th grade boys in one of her reading classes. The main emphasis in this was on career awareness and how to get the students to see that by becoming aware they were not actually making decisions.

A three-dimensional map of the town of Millville was prepared by Gloria Lizardi. This map, along with questions designed for use with it, is being used by many of the elementary teachers within the district. Gloria has also been working with information for the Career Resource directory.

"With team-teaching it's very easy to get the rest involved", was one of the comments made by Don Dugan. He will also be taking his intermediate level students to Gettysburg on a field trip; as a preview of some of the things they will be seeing, Don has had his students do research work on the careers involved in establishing and maintaining a tourist site. Next year, he is planning to introduce the dignity of work through a "web of life."

Spending over 1 1/2 hours with the executives of a bank in Berwick resulted from Bob Zalonis asking a simple question on careers involved in banking. Bob took photographs of all the individual careers in the bank, had them processed, and returned to the bank. On this trip the executive narrated a cassette on the jobs. These executives were very interested in having the students themselves come into the bank, but time prevented this and Bob decided photographs would have to do.

Steve Kundrat will be implementing his TRACE unit in a 9th Grade Social Studies class - students in this class will be working on communication careers. He will ask the student to do interviewing of local people, as well as to learn how to use media in Career Education. Another aspect of the units will be research on individual careers. Steve also feels that "circles" on the Junior High level are drawing out the students

Work on collating local information on the Resource Directory has been one of the main areas of emphasis for Ginny Ryan. Involved in this were endless numbers of phone calls and typing. Another area of interest for Ginny was the production of both a three-dimensional map of Bloomsburg and a career education game for teacher use.

"Writing a TRACE Unit is not fun, but when you implement it, - WOW", was a comment heard from Irene Mitchell. This only echoed what many people shared on their TRACE's. Irene emphasized environmental careers and at one point, took her Second Graders on a trip to the Montour Preserve.

Jack Beierschmitt, a Language Arts Coordinator, has expressed his interest in using Career Education in his Senior short-story classes. One thing he brought to the attention of his students recently, was the role of the technician.

Gloria Ermish has been using the Newspaper as the key supplement to her curriculum. She has been having her students clip career ed articles from the newspapers and attach them to the appropriate career ed cluster poster. Another innovation that her 4th Graders enjoyed, was the building of a Futuristic House, from an empty refrigerator carton.

Supporting the elementary teachers is the main role of Simone Taylor, a counselor from the Millville District. In addition, she has been working with a three-dimensional map of the Millville area.

Jane Gadomski has been working with Gloria Ermish in implementing her unit on careers. One main emphasis was the finding and sharing requirements for doing jobs in certain areas. Jane feels that "word of mouth" is the one method of sharing and implementing career education within a district.

Adoption of transportation units for 1st Graders has been one of the major areas where Maxine Arnow has been involved. Field trips to an airport and other transportation centers has been planned for her students. Maxine, one of the Second Generation CEI participants has also volunteered to write a career education TRACE unit

Happenings

A Career Education two week graduate course will be offered for professionals in the Columbia-Montour Vo-Tech Area this summer. Dr. Magill will be the instructor, and the location will be the Bloomsburg State College. Elementary and Junior High School level activities will be emphasized. Contact your local superintendent for details and permission to represent your district.

When September, 1974, arrives, the Career Education Services will again offer individual career information service at a cost to districts of $40.00 per hundred students. This allows pupils to select careers that interest them for further exploration. Materials are conveyed by the IMC Van delivery with a week or less turn-around. New and updated materials have been added for Junior and Senior High levels. A completed new series has been developed for elementary children at a Third Grade reading level.

Make sure now that your district has placed an order for your students.

* * * * * *

The new 1974-75 Occupational Outlook Handbook is now available. Check your guidance office or library.

* * * * * *

The Eleventh Annual PDE Curriculum Conference to be held at Shippensburg State College, June 18-21, will include a workshop on the use of Pennscript and Career Information.

The Workshop will explore more effective ways of providing students with career information. Emphasis will be placed on techniques and materials which will expand resources for students use and which will save counselors and teachers time and frustration.

Superintendents and Principals have registration information on this workshop. (PDE Basic Education Circular 88 - Workshop #28.)

Workshop - Pennsylvania State University - "Emerging Trends and Related Arts in the Middle School."

June 10-21, 1974 A Workshop for industrial arts and other practical and fine arts teachers conducted by the industrial arts faculty in the Division of Academic Curriculum and Instruction of the College of Education.

A number of emerging trends in education are of growing concern to teachers. The trend toward the middle school with an accompanying development in the interdisciplinary approach to team teaching are two such movements. These trends, together with the evolution of exploratory experiences into Career Education are the focus of this workshop.

Purpose: To provide participants with conceptual resources for industrial arts and related arts program development in the middle school.

To provide an opportunity for teaming with other related arts teachers with similar interests.

To provide an opportunity to construct curriculum plans that participants can use in their programs. Contact Pupil Personnel Services, at C.S.I.U., if interested.

C.E. Raises Academic Achievement

A report published at Marshall University, Huntington, W. Va., offers proof that CE programs raise students' proficiency in regular academic subjects. Based on testing of two grade 1-6 student groups enrolled in the Lincoln County (W.Va.) Career Awareness Program, research shows those given CE experiences rated 11% higher on language arts, and 24.5% higher on math achievement. Naturally, they rated 18% higher in occupational awareness than a control group not exposed to CE enrichment. Grades 7-10 are covered for career maturity attitudes and competence. Parental and teacher attitudes are given for all grades. Write for a free copy of this study to: LeVene A. Olson, Assistant professor, Dept. of Occupational and Adult Education, Marshall University,

"There were no failures with any of my students - this was just fabulous." This comment was expressed by Karen Rosenberg in explaining the Environmental Learning Center activities. The Center was used for one week with science students in Grades Four, Five, and Six. A trip to the Montour Preserve to replant a very badly eroded area was the culmination of Karen's unit on the environment. This led the students to ask many questions and learn much information from the soil conservationist who was there.

Andy Soback has volunteered to go into other classes within his district to explain city government careers. An activity involved in this presentation is the handing out of cards containing information on city jobs - students work with these cards in role-play situations. Andy also feels that students should be given the opportunity to interact with councilmen.

Elementary students of Anne Javsicas' have been involved in both the advertising and production of "Dream Cream". This ice cream is made with left-over milk from the school cafeteria. The students themselves produced a video-tape on the product and in this way many different career clusters were brought into focus even though decision-making was one of Anne's primary aims. This one incident just goes to show how effective a counselor can be.

Ernie Cole has been using "expertise" gained from the third week of training in implementing "circles" in his Junior High School classes. Along with other members of this team, he participated in a presentation to other faculty within the school.

Designing and producing their own musical instruments was a major aspect of Diane Butera's science unit on sound. After the production was completed Diane asked the students on an evaluation sheet, to list the number of careers that would be involved in producing their instrument. The students were just amazed at the number they finally came up with - in fact, jobs in 13 of the 15 career clusters were mentioned. The students also gave much input in designing some of the curriculum that Diane will be using.

A lesson on cities has spilled over into all the other areas of a Third Grade self-contained class taught by Arwilda Shoemaker. The class is set up on its own banking system using Shoemaker dollars; each student is issued money for certain jobs that are completed. At the end of the series, students are able to purchase the classroom businesses as well as seats in Arwilda's car.

The "Market" game has been used by this 3rd Grade class, and Arwilda is very willing to share some of the side effects of the game. She is very pleased with the results and feels it can be used on several grade levels. A field trip to Harrisburg was the highlight of the cities lesson with her class.

Arwilda is "sold" on TRACE units, and plans to write her whole school year lessons in this manner next year.

Completing application forms and writing business letters applying for a job were the assignments Ann Brandt made to her Junior High students after attending the three-day CEI Workshop. Ann's students also used "Compulearn", a computerized career information console on an individual basis. The students were very enthusiastic and Ann feels it can be a very positive learning experience.

Julie Yerger is working with sixth graders on awareness of jobs by using both King Features and the CSIU Career Education comics. Also planned is a lesson on newspapers as part of her communication sets program. During this phase the student will tour the Berwick Enterprise/ Morning Press Building, in addition to filming various locations within the community.

Becoming a member of a six-person Curriculum development writing team is one of the ways Ed Gerler is becoming a "multiplier" of career ed within his district. Ed will be writing at the 5th Grade level to tie everything together. Conducting HDP "Magic Circles" within all the elementary grade levels is another method by which Ed is influencing self-esteem within his schools.

To emphasize the differences between mass-production and craftsmanship was the integral part of Bob Nash's TRACE unit on Silas Marner. After working in both types of production, his students are able to relate the differences in each area. Mass - produced on an assembly line were bird-feeders, while candlesticks were produced by individual craftsmen.

An Environmental Careers Learning Station has been developed by CEI participants and Staff for intermediate grade levels. The reading level is Third Grade. Featuring hands-on-materials, thirty-one independent activities are available. Pre-tests, post-tests, and a teachers guide were also developed. Field testing has been done at the Millville Pine Elementary School, and the Bloomsburg Beaver Elementary School. This learning station may be borrowed from the I.U.

3M Sound Page Unit - This piece of equipment allows for 8 X 11 "pages" to be utilized on which you can record 4 minutes of sound. On the front side of the "page," drawings, typing, or taped-on pictures may be displayed. A commercial set of 200 occupational titles is available. Unlimited usage for localization and individualization exists.

Big Bibliography Bargain.... In price and size it's the biggest Bibliography bargain we've seen. It's free and almost 300 pages. It's the brand new "Facilitating Career Development: An Annotated Bibliography" by Larry J. Bailey, et all.

The bibliography includes seven basic areas of CE interest: educational theories behind CE; computer-based guidance systems; CE conferences, workshops and institutes; measuring vocational behavior; gaming and simulations; research and development; locally developed programs and approaches to CE.

Three Dimensional Pa. Career Development Model - A multi-colored 18" X 27" X 4-1/2" cubistic model has been developed by CEI staff and is available for loan. This is helpful for explaining the concerns, domains, and grade levels within the state model. The 67 career development goals are included on the cubes for easy reference.

Pennscript and Resource Center, 5301 Jonestown Road, Harrisburg. Penna. Phone 717-652-4981.

If you are interested in previewing current materials relevant to Career Education, plan to visit this Resource Center. A consultant from the PDE will be available to suggest uses for your classes or counseling sessions. It is recommended that you call for an appointment.

Keys-Career Exploration from SRA. Ten filmstrips and casettes describe areas of careers. Available for loan.

Career Education in the Middle/Junior High School by Rupert Evans, Kenneth Hoyt, and Garth Mangum. Available for loan.

VEIN - Vocational Education Information Network Ganser Library, Millersville State College, Millersville, Penna. 17551. Phone 717-872-5411 (Extension) 552.

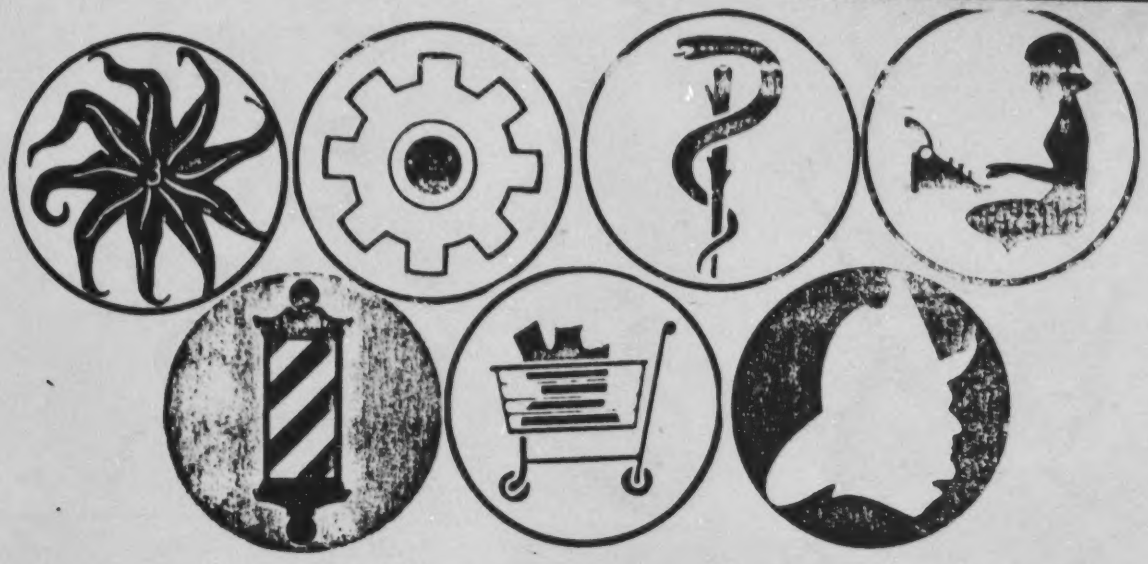
This is a free, modern information service to all persons in Pennsylvania who are involved with vocational, technical and continuing education programs. This service can provide you with current information research as well as on-going programs in Career Education. For further information, write or call the above.

Career Clusters and the World of Work (Sound Filmstrip - Audio Visual Laboratory)

This is a new sound filmstrip just received at the CSIU and available for loan. It presents a comprehensive but concise overview of the fifteen career clusters. Here's a chance to introduce the cluster concept to your students, especailly if you plan to utilize the Career Education Packet service in your classes.

TV Series to Debut in Fall

Bread and Butterflies is a new educational TV series of 15 minute color programs for 9 to 12 year olds. Its goal is to bridge the gap between kids and adults.



CENTRAL SUSQUEHANNA INTERMEDIATE UNIT
P. O. BOX 213
LEWISBURG, PENNSYLVANIA 17837

APPENDIX K

New Career Education Materials

1. 6-page cluster descriptions
2. Complete listings of materials
3. PENNScript 6-page reprints
4. Occupational Outlook Handbook reprints
5. Combination of PENNScript and Occupational Outlook Handbook reprints
6. Staff written reprints

HOSPITALITY and RECREATION

COOKS, MAIDS, WAITERS, WAITRESSES, HOTEL & MOTEL MANAGERS, DESK CLERKS, BELL HOPS, PARK RANGERS, THEATER OPERATORS, LIBRARIANS.

The following material is being shared with the desire that it will increase your understanding of this particular career cluster. Information has been derived from the Occupational Outlook Handbook, PENNScript, Grayson County College's Analysis of Fifteen Occupational Clusters, and other miscellaneous sources. Additional specific career information may be obtained by returning a Career Education Services Request Card.

CAREER INFORMATION

DISTRIBUTED BY: Career Education Service
Central Susquehanna Intermediate Unit
Box 213, Lewisburg, Penna. 17837

HOSPITALITY AND RECREATION

COMMERCIAL AND NON-COMMERCIAL TRAVEL BUREAUS

Travel bureaus, both commercial and non-commercial, are generally limited to providing the public with travel information and attempting to promote goodwill.

PUBLIC, INDUSTRIAL, AND PRIVATE RECREATION
(Commercial and Non-Commercial)

Any occupation concerned with athletics or sports, entertainment, amusement, or recreation services is included in this category.

RECREATION CONCERNED WITH NATURAL RESOURCES

This category includes those occupations concerned with recreational facilities provided by Nature, i.e. ocean and lake beaches, forests, wildlife areas, etc.

LODGING

This area is concerned with commercial over night accommodations.

HOSPITALITY AND RECREATION...

HOSPTIALITY AND RECREATION

A. Commercial and Non-Commercial Travel Bureaus - Travel bureaus, both commercial and non-commercial, provide the public with travel information and attempt to promote good will. These bureaus differ from the travel agency in that the latter recommends specific trips, resorts, or modes of transportation and arranges accommodations, whereas the travel bureau simply provides information about a designated area, such as a city, an area encompassing several cities, or even several states. These bureaus generally promote and encourage travel to a specific area through advertising, publicity, and the information provided at the bureau itself. By maintaining libraries of information and photographs of the area, the bureau personnel enable visitors to receive a representative outlook on the particular region.

The information bureau is usually staffed by highly trained personnel who have, in close proximity, the answers to most questions asked by tourists. They know the locations of restaurants, theatres, clubs, etc., and are able to give coherent directions. The bureau personnel also include some untrained individuals who maintain the facilities and serve as typists, telephone operators, etc.

- Travel Agent
- Information Clerk
- Agency Representative
- Reservation Agent

B. Public, Industrial, and Private Recreation (Commercial & Non-Commercial - Because of the great expanse that this category encompasses, it is necessary only to state that any occupation concerned with application of the theoretical or practical aspects of athletics and sports, with entertainment (such as a hypnotist, wire walker, show girl), with bowling or billiard alleys, golf courses, tennis courts, or any other related activity, with operating games of chance or skill or other types of amusement equipment (i.e., the ferris wheel, roller coaster, merry-go-round), running fairs, carnivals, circuses, or amusement parks, with running games of chance in gambling establishments, with taking tickets, distributing programs, and escorting patrons to seats in public places, and other occupations concerned with amusement and recreation services falls into the category of Public, Industrial, and Private Recreation.

- Athletic Coach
- Recreation Leader
- Recreation Workers
- Professional Athlete
- Club Worker
- Ski Instructor

C. Recreation Concerned with Natural Resources - Experience indicates to us that only those things which we earn can be precious; however, we need look only to our inheritance of the wonders of Nature to realize that they also are precious. The pulse of public interest in our inheritance has quickened in the last decade. We find ourselves trying to achieve anew the experiences of beauty that Nature has bestowed upon us. This interest has opened up a relatively new economic venture for many enterprising cities and/or states, companies, and individuals who have begun to provide a means by which man can enjoy his natural resources. Providing recreational opportunities to enjoy the beauties and wonders of nature is truly a unique and fast-growing field.

- Park Ranger
- Campground Attendant
- Lifeguard
- Information Center Personnel
- Tourist Guide

D. Lodging - This area is concerned with Hotel and Motel accommodations. Careers range from formally trained managers to on-the-job training in many other areas. Experience is often an asset in obtaining a job.

- Manager
- Clerk
- Bellman
- Bartender
- Housekeeper

A LISTING OF INFORMATION SOURCES

RECREATION AS YOUR CAREER American Association for Health, Physical Education & Recreation, 1201 16th St., N.W., Washington, D.C. 20036.

SHAPING YOUR FUTURE: HOTEL OCCUPATIONS Teen, The Evening Star, 225 Virginia Ave., S.E., Washington, D.C. 20003.

WHERE THE ACTION IS National Recreation & Park Association, 1700 Pennsylvania Ave., N.W., Washington, D.C. 20006.

YOUR CAREER IN THE HOTEL--MOTEL INDUSTRY The Educational Institute of the American Hotel & Motel Association, Kellogg Center, East Lansing, Michigan 48823.

American Recreation Society, Room 622 Bond Building, 1404 New York Avenue. N.W., Washington, D.C. 20005.

National Recreation Association, 8 West Eighth Street, New York 10011.

US Department of the Interior, National Park Service, Washington, D.C. 20240.

American Society of Travel Agents, Inc. 360 Lexington Avenue, NY 10017.

Attracting Young People to the Lodging Industry—American Hotel and Motel Association, 888 Seventh Avenue, New York, NY 10019, $2.50 (1971)

Developing a Hospitality Program in High Schools—Council on Hotel, Restaurant and Institutional Education, 1522 K Street, N.W., Washington, D.C. 20005 (1970)

Directory of Hotel, Restaurant, Institutional Schools—Council on Hotel, Restaurant and Institutional Education, 1522 K Street, N.W., Washington, D.C. 20005, $1.00 (1972)

Scholarships in Hotel and Restaurants Schools—Council on Hotel, Restaurant, and Institutional Education, 1522 K Street, N.W., Washington, D.C. 20005, 50c (1969)

Your Career in the Hotel-Motel Industry—The Educational Institute of the American Hotel and Motel Association, Kellogg Center, Michigan State University, East Lansing, MI 48823, (1971)

1973 Catalog—The Educational Institute of the American Hotel and Motel Association, Kellogg Center, Michigan State University, East Lansing, MI 48823 (1973)

A Hotel Motel Career—American Hotel and Motel Association, 888 Seventh Avenue, New York, NY 10019 (1972)

A Bright Future—The National Executive Housekeepers Association, Inc., Business and Professional Building, Second Avenue, Gallipolis, OH 45631 (1972)

Recreation as Your Career—American Association for Health, Physical Education and Recreation, 1201 16th Street, N.W., Washington, D.C. 20036 (1971)

Where the Action Is—National Recreation and Park Association, 1700 Pennsylvania Avenue, N.W., Washington, D.C. 20006 (1972)

Careers in the National Park Service—National Park Service, Washington, D.C. 20402 (1971)

Wanted—The National Executive Housekeepers Association, Inc., Business and Professional Building, Second Avenue, Gallipolis, OH 45631 (1971)

Club Management . . . A Path to a Rewarding Future—Club Managers Association of America, 5530 Wisconsin Avenue, N.W., Washington, D.C. 20015 (1973)

The Recreational Therapist—National Association of Mental Health, Inc., 10 Columbus Circle, New York, NY 10019 (1967).

Recreation as Your Career. American Association for Health, Physical Education and Recreation, 1201 16th Street, N.W., Washington, D.C. 20036. Pamphlet. Free.

HOSPITALITY AND RECREATION

The field of hospitality and recreation is one of the fastest growing career areas in our country today. Americans are living longer and, thanks to the increased development of machinery, Americans are working shorter hours than they did in years past. For these reasons, we have greater and greater amounts of free or leisure time in which to travel, pursue hobbies, and enjoy ourselves. As a result of this increase in leisure time, there is a growing demand for hospitality workers who serve us when we travel and recreation specialists who help us enjoy and make good use of our free time.

The list of recreational workers is almost endless. Some of them design and manage our city, state, and national parks; some of them operate the movie theaters, bowling alleys, golf and tennis clubs, and sports programs in your community; others operate the museums, libraries, zoos, and swimming pools we all enjoy; and still others run our summer camps and camping facilities, and our mountain and ocean resorts. Hospitality workers are all those people who work in the hotels, motels, and inns which provide us food and lodging services when we travel away from home. Some of them are cooks, desk clerks, maids, room-service clerks, waiters, waitresses, and managers. These lists are by no means complete but they do give you an idea of the wide range of career opportunities in the field of hospitality and recreation.

You have probably come into contact with many hospitality and recreation workers already in your life for they can be found nearly everywhere you go. Some work indoors and some work outdoors; <u>some</u> work with food and things, <u>most</u> work with people, and <u>all</u> work to see that Americans enjoy and make good use of their leisure time.

The wide range of career opportunities in hospitality and recreation may require an equally wide variety of skills and levels of education. One may not even need a high school diploma to become a maid or a bellhop in a hotel. Many jobs in this field, such as motel and hotel food service work (cooks helpers, waiters, and waitresses) can be acquired with a high school diploma and advancement is possible with special training and experience. One can become a highly paid hotel or motel manager with 2-4 years of schooling after graduation from high school. To become an administrator or person in charge of a state or national park, one may have to go to school 4 or more years after graduation.

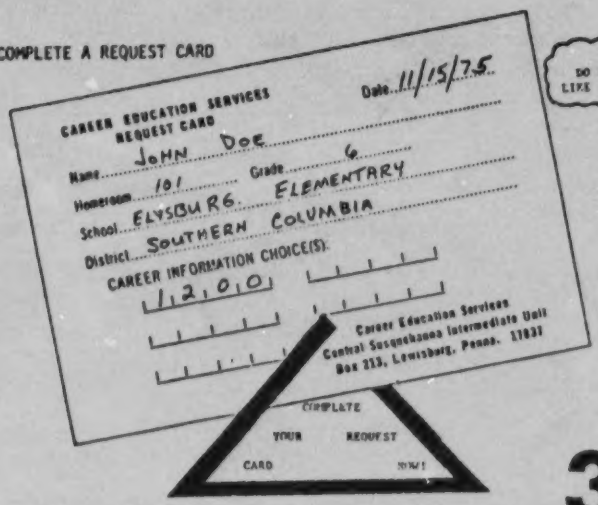
The rewards of pursuing a career in hospitality and recreation work are many--both in terms of dollars and personal satisfaction. The field is growing rapidly so there are many new job openings each year. Like any other group of careers, hospitality and recreation also has its disadvantages. Some of the work is seasonal in various parts of the country because people tend to travel and participate in certain kinds of recreational activities more in the summer than the winter and vice versa. Ski resorts do not do much business in the summer and swimming pools do not do much business in the winter!

Also, many types of travel and recreation are considered luxuries and when people find themselves short of money or out of work, travel and paid recreational activities are some of the first things they give up.

1 SELECT THE CAREERS ABOUT WHICH YOU WISH INFORMATION.

1974-75

2 COMPLETE A REQUEST CARD



3 RETURN THE REQUEST CARD TO YOUR TEACHER [who will return it to CSIU].

YOU WILL RECEIVE AN ENVELOPE WITH THE DESIRED INFORMATION IN A FEW DAYS. THIS IS YOURS TO KEEP.

CAREER INFORMATION

DISTRIBUTED BY Career Education Service
Central Susquehanna Intermediate Unit
Box 213, Lewisburg, Penna. 17837

0900 HOSPITALITY AND RECREATION CLUSTER
0901 Athletic Coach
0908 Bartender
0914 Camp Counselor
0919 Campground Attendant
0920 Club Worker
0907 Greenskeeper
0910 Hotel Occupations
0916 Lifeguard and Ski Instructor
0906 Motion Picture Projectionist
0905 Park Ranger
0918 Professional Athlete
0913 Recreation Farm Manager
0909 Recreation Workers
0903 Reservations Agent
0904 Travel Counselor

(Additional Careers)

0123 Careers with Horses
0529 Executive Housekeeper
1501 Flight Attendent
0615 Natural Resource Manager

Jobs related to spare or leisure time activities. Jobs in parks, hotels, clubs, sports, amusements, and hobbies.

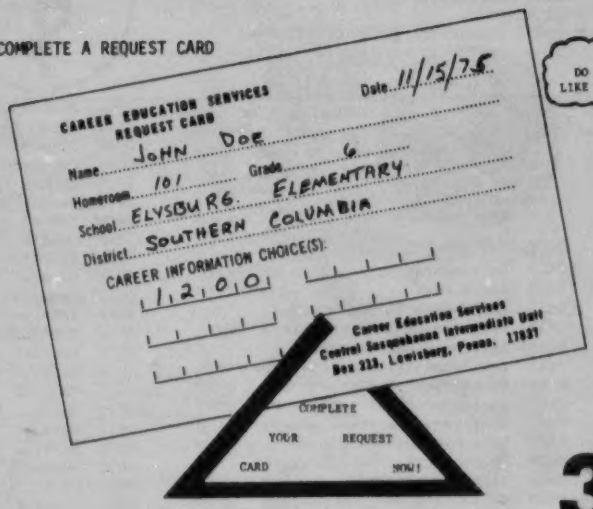
ELEMENTARY INFORMATION

0900 HOSPITALITY AND RECREATION CLUSTER
09AA Magician
09AB Park Ranger
09AC Porter
09AD Pro-Athlete

1 SELECT THE CAREERS ABOUT WHICH YOU WISH INFORMATION.

1974-75

2 COMPLETE A REQUEST CARD



3 RETURN THE REQUEST CARD TO YOUR TEACHER [who will return it to CSIU].

YOU WILL RECEIVE AN ENVELOPE WITH THE DESIRED INFORMATION IN A FEW DAYS. THIS IS YOURS TO KEEP.

CAREER INFORMATION

DISTRIBUTED BY Career Education Service
Central Susquehanna Intermediate Unit
Box 213, Lewisburg, Penna. 17837

CLUSTER LISTING

Removing nature's riches from the earth and using the land to raise animals and crops. Jobs with oil, trees, rocks, animals and plants.

0100 AGRI BUSINESS AND NATURAL RESOURCES CLUSTER

0115 Agricultural Chemical Fieldman
0124 Agricultural Engineer
0113 Agricultural Supplies Manager
0123 Careers with Horses
0120 County Agricultural Agent
0126 Egg Farmer
0106 Farm Equipment Mechanic
0105 Farmer, Cash Grain
0104 Farmer, Dairy
0107 Farm Hand, Poultry
0121 Farm Loan Officer
0127 Floral Designer
0122 Food and Drug Inspector
0101 Forester
0110 Forest Technician
0118 Geologists
0108 Groundsman and Gardener
0109 Livestock Farmer
0117 Logger
0103 Miner
0116 Mining Engineer
0111 Ornamental Horticulturist
0114 Petroleum Workers and Engineers
0125 Poultry Eviscerator
0119 Soil Conservationists
0112 Soil Scientists
0102 Veterinarian (Additional Careers)
1103 Biologist
1105 Chemist
0616 Environmental Inspectors
1102 Fish Hatchery Worker
0907 Greenskeeper
0416 Heavy Equipment Operator
0608 Life Scientists
1218 Meat Cutter
0615 Natural Resource Manager
0905 Park Ranger
1304 Pet Care Occupations
0913 Recreation Farm Manager
0605 Wildlife Conservation

Typing, storing, studying, and distributing records of people's work. Jobs with typewriters, computers, copying machines and records.

0200 BUSINESS AND OFFICE CLUSTER

0202 Accountant
0214 Actuary
0205 Bookkeeper
0203 Calculating Machine Operator
0204 Clerk Typist
0216 Computer Programmer
0206 Digital Computer Operator
0221 Executive Manager
0207 File Clerk
0212 Keypunch Operator
0210 Legal Secretary
0211 Medical Secretary
0215 Messenger
0218 Office Machine Operators
0213 Office Machine Servicemen
0217 Personnel Workers
0201 Receptionist
0208 Secretary
0219 Statistician
0209 Stenographer
0220 Systems Analyst (Additional Careers)
1205 Bank Clerk
1214 Credit Manager
0121 Farm Loan Officer
1412 Librarian
1431 Public Relations Workers

Getting information to people. Jobs with telephones, telegraphs, magazines, newspapers, books, radio and television.

0300 COMMUNICATIONS AND MEDIA CLUSTER

0301 Announcer, Radio and Television
0318 Bindery Worker
0321 Broadcast Technician
0302 Cable Splicer
0316 Composing Room Occupations
0315 Copywriter
0303 Developer
0322 Ground Radio Operators and Teletypists
0313 Illustrator
0305 Lineman
0306 Painter, Sign
0317 Photoengraver
0307 Photographer
0319 Photolab Occupations
0308 Printing Press Operator
0320 Radio and T.V. Occupations
0309 Reporter
0304 Satallite and Laser Transmission
0314 Station Installer (Telephone Equipment Installer)
0310 Technical Illustrator

0323 Technical Writer
0311 Telephone Operator
(Additional Careers)
1012 Electronics Technician

All activities in building. Jobs with cement, plastic, wire, and tile.

0400 CONSTRUCTION CLUSTER
0401 Architect
0402 Bricklayer
0403 Carpenter
0418 Cement Finisher
0423 Civil Engineer
0404 Construction Worker
0405 Draftsman
0406 Electrician
0407 Floor Layer
0408 Glazier
0416 Heavy Equipment Operator
0409 Insulation Worker
0414 Lather
0421 Marble Setters
0417 Operating Engineer
0410 Plasterer
0411 Plumber
0412 Roofer
0415 Sheet Metal Worker
0422 Stonemason
0413 Structural Steel Worker
0420 Surveyor
0419 Welder
(Additional Careers)
1516 Diesel Mechanic
1003 Engineering Aide
0116 Mining Engineer
0519 Painter

Jobs with food, clothing, and textiles, home furnishing, and families.

0500 CONSUMER AND HOMEMAKING CLUSTER
0516 Baker
0528 Busboy/Busgirl
0506 Chef
0527 Cook
0514 Custom Tailer
0501 Dietician
0507 Dry Cleaner
0502 Electrical Appliance Repairman
0529 Executive Housekeeper
0523 Food Service Occupations
0510 Food Service Supervisor
0503 Furniture Upholsterer
0504 Home Economist
0526 Homemaker
0505 Interior Designer
0511 Janitor
0518 Kitchen Helper
0509 Knitting Machine Operator
0521 Laundry Superintendent
0520 Maid, General
0519 Painter
0522 Presser
0524 Private Household Workers
0512 Seamstress
0513 Sewing Machine Operator
0525 Shoe Repairman
0517 TV Serviceman & Repairman
0515 Waiter/Waitress
(Additional Careers)
0908 Bartender
0120 County Agricultural Agent
1029 Cutter, Hand & Machine
1028 Dye Tub Operator
0127 Floral Designer
0108 Groundsman & Gardener
1305 Marriage Counselor
1218 Meatcutter
1206 Model
0111 Ornamental Horticulturist

The protecting and saving of the natural things around us, including the repair of damage man has done. Jobs are concerned with land, air, water, and all living things.

0600 ENVIRONMENT CLUSTER
0609 Astronomers
0606 Biochemist
0613 Environmental Engineers
0616 Environmental Inspectors
0611 Environmental Laborers
0612 Environmental Physical Scientists
0614 Environmental Planners
0617 Environmental Technicians
0602 Environmental Testors
0601 Exterminators
0607 Geophysicist
0608 Life Scientists
0604 Meteorologist
0615 Natural Resource Manager
0610 Physicist
0603 Water Treatment Plant Operator
0605 Wildlife Conservation
(Additional Careers)
1103 Biologist
1105 Chemist
0423 Civil Engineers
0122 Food and Drug Inspector
0101 Forester
0110 Forest Technician
0118 Geologist
0834 Laboratory Tester
1101 Oceanographer
0114 Petroleum Workers
0829 Sanitarian
0119 Soil Conservationist
0112 Soil Scientist

Creating, writing, performing, and studying. Jobs with music, plays, dance, poetry, art, novels, history, and languages.

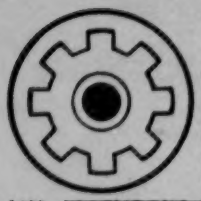
0700 FINE ARTS AND HUMANITIES CLUSTER
0702 Actors and Actresses
0706 Anthropologists
0708 Art Curator
0707 College and University Teachers
0703 Dancer
0709 Geographer
0710 Historian
0701 Instrumental Musician
0712 Interpreter
0704 Musicians and Music Teachers
0714 Music Composer
0705 Singers and Singing Teachers
0711 Theologian
0713 Visual Arts
0715 Writers
(Additional Careers)
1419 Clergyman
0303 Developer
0307 Photographer

Care and repair of the human body and mind.

0800 HEALTH CLUSTER
0802 Blood Bank Technician
0831 Community Health Services
0803 Cytotechnologist
0804 Dental Assistant
0805 Dental Hygienist
0806 Dental Lab Technician
0807 Dentist
0808 Electrocardiograph Technician
0823 General Practitioner
0827 Hospital Administrator
0809 Inhalation Therapist
0834 Laboratory Tester
0824 Medical Assistant
0830 Medical Emergency Services
0825 Medical Lab Assistant
0810 Medical Records Librarian
0832 Medical Technologist
0811 Nurse's Aide
0812 Nurse, Licensed Practical
0813 Nurse, Registered
0814 Occupational Therapist
0815 Optometrist
0816 Orderly
0817 Pediatrician
0818 Pharmacist
0828 Physical Therapist
0801 Physical Therapy Aide
0819 Podiatrist
0820 Psychologist, Clinical
0821 Psychiatric Aide
0826 Radiologic Technician
0829 Sanitarian
0822 Surgical Technician
0833 Tissue Technologist
(Additional Careers)
0501 Dietician
0521 Laundry Superintendent
0211 Medical Secretary
1217 Optician, Dispensing
0201 Receptionist
0102 Veterinarian

Jobs related to spare or leisure time activities. Jobs in parks, hotels, clubs, sports, amusements, and hobbies.

0900 HOSPITALITY AND RECREATION CLUSTER
0901 Athletic Coach
0908 Bartender
0914 Camp Counselor
0919 Campground Attendant
0920 Club Worker
0907 Greenskeeper
0910 Hotel Occupations
0916 Lifeguard and Ski Instructor
0906 Motion Picture Projectionist
0905 Park Ranger
0918 Professional Athlete
0913 Recreation Farm Manager
0909 Recreation Workers
0903 Reservations Agent
0904 Travel Counselor
(Additional Careers)
0123 Careers with Horses
0529 Executive Housekeeper
1501 Flight Attendent
0615 Natural Resource Manager



The making of anything not found in nature. Designing, assembling, producing, packaging, advertising, and transporting.

1000 MANUFACTURING CLUSTER
1022 Aircraft, Missile, and Spacecraft Manufacturing
1023 Aluminum Industry Occupations
1001 Boilermaker
1002 Cabinetmaker
1017 Car Manufacturing
1025 Chemical Engineer
1019 Chemical Industry Workers
1026 Chemical Laboratory Technician
1029 Cutter, Hand and Machine
1024 Drug Industry Workers
1028 Dye-Tub Operator
1020 Electronics Occupations
1012 Electronics Technician
1005 Electroplater
1003 Engineering Aide
1004 Foundry Worker
1027 Industrial Engineer
1021 Instrument Makers
1018 Iron and Steel Workers
1006 Machinist
1013 Millwright
1008 Molder and Coremaker
1016 Office Machine Manufacturing
1009 Packaging Laborer
1007 Paper Products Worker
1014 Rolling Mill Operator
1010 Tire Recapper
1011 Tool and Die Maker
1015 Tool Grinder Operator
(Additional Careers)
0221 Executive Manager
0419 Welder
0834 Laboratory Tester

All jobs concerning the oceans and the plants, animals, and minerals in the oceans. Fishing, growing, studying, exploring, and harvesting.

1100 MARINE SCIENCE CLUSTER
1104 Aquatic Biologist and Aquanaut-Diver
1103 Biologist
1105 Chemist
1108 Coast Guard
1107 Fisherman
1102 Fish Hatchery Worker
1101 Oceanographer
(Additional Careers)
0606 Biochemist
0607 Geophysicist
0608 Life Scientists

Getting goods and services to the customer. Jobs in buying from the manufacturer, shipping, storing, advertising, and selling.

1200 MARKETING AND DISTRIBUTION CLUSTER
1222 Advertising Worker
1226 Automobile Accesories Installer
1227 Automobile Body Repairer
1201 Automobile Mechanic
1225 Automobile Mechanic (Special)
1202 Automobile Parts Salesman
1203 Automobile Salesman
1204 Automobile Service Station Attendant
1205 Bank Clerk
1224 Buyer
1228 Cashier, Retail Store
1214 Credit Manager
1229 Display Person
1219 Insurance Adjuster
1221 Manufacturer's Salesman
1223 Marketing Research Worker
1218 Meatcutter
1206 Model
1213 Motorcycle Repairman
1217 Optician, Dispensing
1215 Routeman
1210 Salesman, Food
1209 Salesman, General
1212 Salesman, Insurance
1211 Salesman, Real Estate
1220 Shipping and Receiving Clerks
1208 Stock Clerk
1207 Vending Machine Repairman
1216 Watch and Jewelry Repairman
(Additional Careers)
0214 Actuary
0115 Agricultural Chemical Fieldman
0113 Agricultural Supply Manager
0313 Illustrator
0121 Farm Loan Officer
0306 Painter, Sign
0307 Photographer
0310 Technical Illustrator
0123 Technical Writer

Working on or near individual people or animals. Barbering, hairstyling, undertaking, pet grooming, boarding, and training.

1300 PERSONAL SERVICES CLUSTER
1301 Barber
1306 Chauffeur
1307 Cosmetologist
1302 Embalmer
1303 Funeral Director
1308 Health Salon Occupations
1305 Marriage Counselor
1304 Pet Care Occupations
(Additional Careers)
0123 Careers with Horses
1425 Caseworker
0524 Private Household Worker
1430 Teacher, Nursery School
0102 Veterinarian

Work which benefits groups of people. Teachers, police, firemen, government workers, military, and public utilities.

1400 PUBLIC SERVICES CLUSTER
1426 Armed Forces
1425 Caseworker
1419 Clergyman
1429 Corrections Officer
1401 Counselor
1402 Detective
1423 Electric Power Transmission Occupations
1424 Employment Counselors
1413 F.B.I. Agent
1403 Fingerprint Clerk
1404 Firefighter
1405 Lawyer
1406 Library Assistant
1412 Librarian
1407 Mail Carrier
1408 Mail Truck Driver
1428 Meter Reader
1409 Parking Enforcement Officer
1410 Parking Lot Attendant
1421 Policeman/Policewoman
1411 Post Office Clerk
1422 Power Plant Occupations
1431 Public Relations Workers
1427 State and Local Government Workers
1414 State Highway Patrol
1415 Teacher Aide
1416 Teacher, Elementary
1430 Teacher, Nursery School
1417 Teacher, Secondary
1418 Teacher, Special Elementary
1420 Watchmen
(Additional Careers)
0423 Civil Engineers
0920 Club Workers
1108 Coast Guard
0707 College and University Teachers
0831 Community Health Services
0210 Legal Secretary
1305 Marriage Counselors
0217 Personnel Workers
0201 Receptionist
0711 Theologian
0603 Water Treatment Plant Operator

Moving people and goods from one place to another. Airlines, railroads, ships, trucks, and busses.

1500 TRANSPORTATION CLUSTER
1531 Aeronautical Engineer
1513 Aircraft Mechanic
1514 Airline Dispatchers
1511 Airplane Pilots and Co-pilots
1515 Air Traffic Controllers
1502 Bus Driver
1530 Careers in Aerospace
1516 Diesel Mechanic
1501 Flight Attendant
1512 Flight Engineer
1508 Intercity Bus Driver
1518 Licensed Merchant Marine Officers
1509 Local Bus Driver
1507 Local Truck Driver
1520 Locomotive Engineer
1521 Locomotive Fireman
1523 Railroad Brakeman
1522 Railroad Conductor
1529 Railroad Occupations
1526 Railroad Shop Trades
1527 Railroad Track Workers
1503 Taxi Cab Drivers
1517 Ticket Agent
1504 Tractor Trailer Driver
1505 Traffic Rate Clerk
1510 Truck and Bus Mechanics
1506 Truck Driver, over the road
1528 Trucking Industry
1519 Unlicensed Merchant Seaman
(Additional Careers)
1226 Automobile Accessories Installer
1227 Automobile Body Repairer
1201 Automobile Mechanic
1225 Automobile Mechanic (Special)
1202 Automobile Parts Salesman
1203 Automobile Salesman
1204 Automobile Service Station Attendant
1306 Chauffeur
1213 Motorcycle Repairman

ALPHABETICAL LISTING

0202 - Accountant
0702 - Actors and actresses
0214 - Actuary
1222 - Advertising worker
1531 - Aeronautical engineer
0115 - Agricultural chemical fieldman
0124 - Agricultural engineer
0113 - Agricultural supplies manager
1513 - Aircraft mechanic
1022 - Aircraft missle, and spacecraft man
1514 - Airline dispatchers
1511 - Airplane pilots and co-pilots
1515 - Air traffic controllers
1023 - Aluminum industry occupations
0301 - Announcer, radio and television
0706 - Anthropologists
1104 - Aquatic biologist and aquanaut diver
0401 - Architect
1426 - Armed forces
0708 - Art curator
0609 - Astronomer
0901 - Athletic coach
1226 - Automobile accessories installer
1227 - Automobile body repairer
1201 - Automobile mechanic
1225 - Automobile mechanic (special)
1202 - Automobile parts salesman
1203 - Automobile salesman
1204 - Automobile service station attendant

0516 - Baker
1205 - Bank clerk
1301 - Barber
0908 - Bartender
0318 - Bindery worker
0606 - Biochemist
1103 - Biologist
0802 - Blood Bank Technician
1001 - Boilermaker
0205 - Bookkeeper
0402 - Bricklayer
0321 - Broadcast technician
0528 - Busboy/busgirl
1502 - Bus driver
1224 - Buyer

1002 - Cabinetmaker
0302 - Cable splicer
0203 - Calculating machine operator
0914 - Camp counselor
0919 - Campground attendant
1530 - Careers in aerospace
0123 - Careers with horses
1017 - Car manufacturing
0403 - Carpenter
1425 - Caseworker
1228 - Cashier, retail store
0418 - Cement finisher
1306 - Chauffeur
0506 - Chef
1105 - Chemist
1025 - Chemical engineer
1019 - Chemical industry workers
1026 - Chemical lab. technicians
0423 - Civil engineer
1419 - Clergyman
0204 - Clerk typist
0920 - Club worker
1108 - Coast guard
0707 - College and univereity teacher
0831 - Community health services
0316 - Composing room occupations
0216 - Computer programmer
0404 - Construction worker
0527 - Cook
0315 - Copywriter
1429 - Correction officer
1307 - Cosmetologist
1401 - Counselor
0120 - County agricultural agent
1214 - Credit manager
0514 - Custom tailor
1029 - Cutter, and and machine
0803 - Cytotechnologist

0703 - Dancer
0804 - Dental assistant
0805 - Dental hygienist
0806 - Dental lab. technician
0807 - Dentist
1402 - Detective
0303 - Developer
1516 - Diesel mechanic
0501 - Dietician
0206 - Digital computer operator
1229 - Display person
0405 - Draftsmen
1024 - Drug industry workers
0507 - Dry cleaner
1028 - Dye-tub operator

0126 - Egg farmer
0502 - Electrical appliance repairman
0406 - Electrician
1423 - Electric power transmission
0808 - Electrocardiograph technician
1020 - Electronics occupations
1012 - Electronics technician
1005 - Electroplater
1302 - Embalmer
1424 - Employment counselors
1003 - Engineering aide
0613 - Environmental engineers
0616 - Environmental inspectors
0611 - Environmental laborers
0612 - Environmental physical scientists
0614 - Environmental planners
0617 - Environmental technicians
0602 - Environmental testors
0529 - Executive housekeeping
0221 - Executive manager
0601 - Exterminator

0106 - Farm equipment mechanic
0105 - Farmer, cash grain
0104 - Farmer, dairy
0107 - Farm hand, poultry
0121 - Farm loan officer
1413 - F.B.I. agent
0207 - File clerk
1403 - Fingerprint clerk
1404 - Fire fighter
1107 - Fisherman
1102 - Fish hatchery worker
1501 - Flight attendant
1512 - Flight engineer
0407 - Floor layer
0127 - Floral designer
0122 - Food and drug inspector
0523 - Food service occupations
0510 - Food service supervisor
0101 - Forester
0110 - Forest technician
1004 - Foundry worker
1303 - Funeral director
0503 - Furniture upholsterer

0823 - General practitioner
0709 - Geographer
0118 - Geologist
0607 - Geophysicist
0408 - Glazier
0907 - Greenskeeper
0322 - Grounds radio operators and teletypist
0108 - Groundsman and gardener

1308 - Health salon occupations
0416 - Heavy equipment operator
0710 - Historian
0504 - Home economist
0526 - Homemaker
0827 - Hospital administrator
0910 - Hotel occupations

0313 - Illustrator
1027 - Industrial engineer
0809 - Inhalation therapist
0701 - Instrumental musician

1021 - Instrument makers
0409 - Insulation worker
1219 - Insurance adjuster
1508 - Intercity bus driver
0505 - Interior designer
0712 - Interpreter
1018 - Iron and steel workers

0511 - Janitor

0212 - Keypunch operator
0518 - Kitchen helper
0509 - Knitting machine operator

0834 - Laboratory tester
0414 - Lather
0521 - Laundry superintendent
1405 - Lawyer
0210 - Legal secretary
0916 - Lifeguard and ski instructor
0608 - Life scientists
0305 - Lineman
1412 - Librarian
1406 - Library assistant
1518 - Licensed merchant marine officer
0109 - Livestock farmer
1509 - Local bus driver
1507 - Local truck driver
1520 - Locomotive engineer
1521 - Locomotive fireman
0117 - Logger

1006 - Machinist
0520 - Maid, general
1407 - Mail carrier
1408 - Mail truck driver
1221 - Manufacturer's salesman
0421 - Marble setters
1223 - Marketing research worker
1305 - Marriage counselor
1218 - Meatcutter
0824 - Medical assistant
0830 - Medical emergency services
0825 - Medical lab. assistant
0810 - Medical records librarian
0211 - Medical secretary
0832 - Medical technologist
0215 - Messenger
0604 - Meteorologist
1428 - Meter reader
1013 - Millwright
0103 - Miner
0116 - Mining engineer
1206 - Model
1008 - Molder and coremaker
0906 - Motion picture projectionist
1213 - Motorcycle repairman
0714 - Music composer
0704 - Musicians and music teachers

0615 - Natural resource manager
0811 - Nurse's aide
0812 - Nurse, licensed practical
0813 - Nurse, registered

1101 - Oceanographer
0814 - Occupational therapist
1016 - Office machine manufacturing
0218 - Office machine operators
0213 - Office machine servicemen
0417 - Operating engineer
1217 - Optician, dispensing
0815 - Optometrist
0816 - Orderly
0111 - Ornamental horticulturist

1009 - Packaging laborer
0519 - Painter
0306 - Painter, sign
1007 - Paper products workers
1409 - Parking enforcement officer
1410 - Parking lot attendant
0905 - Park ranger
0817 - Pediatrician
0217 - Personnel workers

1304 - Pet care occupations
0114 - Petroleum workers and engineers
0818 - Pharmacist
0317 - Photoengraver
0307 - Photographers
0319 - Photo lab. occupations
0828 - Physical therapist
0801 - Physical therapy aide
0610 - Physicist
0410 - Plasterer
0411 - Plumber
0819 - Podiatrist
1421 - Policeman/policewoman
1411 - Post office clerk
0125 - Poultry eviscerator
1442 - Power plant occupations
0522 - Presser
0308 - Printing press operator
0524 - Private household workers
0918 - Professional athlete
0821 - Psychiatric aide
0820 - Psychologist, clinical
1431 - Public relations workers

0320 - Radio and TV Occupations
0826 - Radiologic technician
1523 - Railroad brakeman
1522 - Railroad conductor
1529 - Railroad occupations
1526 - Railroad shop trades
1527 - Railroad track workers
0201 - Receptionist
0913 - Recreation farm manager
0909 - Recreation workers
0309 - Reporter

0903 - Reservations agent
1014 - Rolling mill operator
0412 - Roofer
1215 - Routeman

1210 - Salesman, food
1209 - Salesman, general
1212 - Salesman, insurance
1211 - Salesman, real estate
0829 - Sanitarian
0304 - Satallite and laser transmission careers
0512 - Seamstress
0208 - Secretary
0513 - Sewing machine operator
0415 - Sheet and metal worker
1220 - Shipping and receiving clerks
0525 - Shoe repairman
0705 - Singers and singing teachers
0119 - Soil conservationist
0112 - Soil scientists
1427 - State and local government workers
1414 - State highway patrol
0314 - Station installer (tel. equipt.)
0219 - Statistician
0209 - Stenographer
1208 - Stock Clerk
0422 - Stonemason
0413 - Structural steelworker
0822 - Surgical technician
0420 - Surveyor
0220 - Systems analyst

1503 - Taxi cab driver
0310 - Technical illustrator

0323 - Technical writer
1415 - Teacher's aide
1416 - Teacher, elementary
1430 - Teacher, nursery school
1417 - Teacher, secondary
1418 - Teacher, special elementary
0311 - Telephone operator
0711 - Theologian
1517 - Ticket agent
1010 - Tire recapper
0833 - Tissue technologist
1011 - Tool and die maker
1015 - Tool grinder operator
1504 - Tractor trailer driver
1505 - Traffic rate clerk
0904 - Travel counselor
1510 - Truck and bus mechanics
1506 - Truck driver, over the road
1528 - Trucking industry
0517 - TV serviceman and repairman

1519 - Unlicensed merchant seaman

1207 - Vending machine repairman
0102 - Veterinarian
0713 - Visual arts

1216 - Watch and jewelry repairman
1420 - Watchman
0603 - Water treatment plant operator
0515 - Waiter/waitress
0419 - Welder
0605 - Wildlife conservation
0715 - Writers

ELEMENTARY CAREER INFORMATION

CLUSTER LISTING

0100 AGRI-BUSINESS AND NATURAL RESOURCES CLUSTER
01AA Agricultural Equipment Salesperson
01AB Agricultural Feed Salesperson
01AC Agricultural Lab Tester
01AD Agricultural Plant Mechanic
01AE Bee Keeper
01AF Berry Farm Helper
01AG Botanist
01AH Breeding Technician
01AI Coal Miner
01AJ Crop Duster
01AK Dairy Farmer
01AL Farm Equipment Operator
01AM Farmer
01AN Florist
01AO Food and Drug Inspector
01AP Food Processing Machine Operator
01AQ Forester
01AR Fruit Farm Foreman
01AS Fur Farmer
01AT Gardner
01AU Geologist
01AV Grain Buyer
01AW Horse Breeder
01AX Kennel Owner
01AY Lumber Grader
01AZ Milk Hauler
01BA Miller
01BB Mining Engineer
01BC Nurseryman
01BD Poultry Farm Hand
01BE Quarry Worker
01BF Rig Builder
01BG Sawyer
01BH Seed Cone Picker
01BI Soil Conservationist
01BJ Tree Trimmer
01BK Veterinarian

0200 BUSINESS AND OFFICE CLUSTER
02AA Bookkeeper
02AB Computer Operator
02AC Keypunch Operator
02AD Office Worker
02AE Receptionist
02AF Typist

0300 COMMUNICATIONS AND MEDIA CLUSTER
03AA News Photographer
03AB Radio Announcer
03AC Reporter
03AD Telegrapher
03AE TV Cameraman

0400 CONSTRUCTION CLUSTER
04AA Architect
04AB Bricklayer
04AC Carpenter
04AD Civil Engineer
04AE Draftsman
04AF Electrician
04AG Heavy Equipment Operator
04AH Painter
04AI Plumber
04AJ Surveyor
04AK Welder

0500 CONSUMER AND HOMEMAKING CLUSTER
05AA Baker
05AB Caterer
05AC Chef
05AD Dry Cleaner
05AE Fashion Designer
05AF Janitor
05AG Restaurant Manager
05AH Seamstress
05AI Sewing Machine Operator
05AJ Waiter

0600 ENVIRONMENT CLUSTER
06AA Astronomer
06AB Ecologist
06AC Environmental Inspector
06AD Environmental Testor
06AE Exterminator
06AF Game Farm Helper
06AG Game Warden
06AH Meteorologist
06AI Naturalist
06AJ Recycling Foreman
06AK Sewage Plant Operator

06AL Urban Planner
06AM Water Systems Foreman

0700 FINE ARTS AND HUMANITIES CLUSTER
07AA Cartoonist
07AB College Professor
07AC Dance Teacher
07AD Theatre Director

0800 HEALTH CLUSTER
08AA Dental Hygienist
08AB Medical Technologist
08AC Nurses Aide
08AD Pharmacist
08AE Physical Therapist

0900 HOSPITALITY AND RECREATION CLUSTER
09AA Magician
09AB Park Ranger
09AC Porter
09AD Pro-Athlete

1000 MANUFACTURING CLUSTER
10AA Assembler
10AB Machinist
10AC Packaging Worker

1100 MARINE SCIENCE CLUSTER
11AA Chemist
11AB Diver Helper
11AC Fisherman
11AD Fish Hatchery Worker
11AE Fishing Boat Hand
11AF Oceanographer
11AG Submarine Worker

1200 MARKETING AND DISTRIBUTION CLUSTER
12AA Car Salesperson
12AB Dairy Route Person
12AC Food Store Manager
12AD Forklift Driver
12AE Model
12AF Warehouse Worker

1300 PERSONAL SERVICE CLUSTER
13AA Barber
13AB Beauty Operator
13AC Mortician

1400 PUBLIC SERVICE CLUSTER
14AA Child Care Worker
14AB Elementary School Principal
14AC Elementary School Secretary
14AD Elementary Teacher
14AE Fireman
14AF Librarian
14AG Mail Carrier
14AH Minister
14AI Policeman
14AJ Power Plant Operator

1500 TRANSPORTATION CLUSTER
15AA Airline Steward
15AB Airport Manager
15AC Bus Driver
15AD Helicopter Pilot
15AE Long Haul Truck Driver
15AF Taxi Driver

ALPHABETICAL LISTING

0100 Agri-Business and Natural Resources Cluster
01AA Agricultural Equipment Salesperson
01AB Agricultural Feed Salesperson
01AC Agricultural Lab Tester
01AD Agricultural Plant Mechanic
15AA Airline Steward
15AB Airport Manager
04AA Architect
10AA Assembler
06AA Astronomer
05AA Baker
13AA Barber
13AB Beauty Operator
01AE Bee Keeper
01AF Berry Farm Helper
02AA Bookkeeper
01AG Botanist
01AH Breeding Technician
04AB Bricklayer
15AC Bus Driver
0200 Business and Office Cluster
04AC Carpenter
12AA Car Salesperson
07AA Cartoonist
05AB Caterer
05AC Chef
11AA Chemist
14AA Child Care Worker
04AD Civil Engineer
01AI Coal Miner
07AB College Professor
0300 Communications and Media Cluster
02AB Computer Operator
0400 Construction Cluster
0500 Consumer and Homemaking Cluster
01AJ Crop Duster
01AK Dairy Farmer
01AB Dairy Route Person
07AC Dance Teacher
08AA Dental Hygienist
11AB Diver Helper
04AE Draftsman
05AD Dry Cleaner
06AB Ecologist
04AF Electrician
14AB Elementary School Principal
14AC Elementary School Secretary
14AD Elementary School Teacher
06AC Environmental Inspector
0600 Environmental Cluster
06AC Environmental Inspector
06AE Exterminator
01AL Farm Equipment Operator
01AM Farmer
05AE Fashion Designer
0700 Fine Arts and Humanities Cluster
14AE Fireman
11AC Fisherman
11AD Fish Hatchery Worker
11AE Fishing Boat Hand
01AN Florist
01AO Food and Drug Inspector
01AP Food Processing Machine Operator
12AC Food Store Manager
01AQ Forester
12AD Forklift Driver
01AR Fruit Farm Foreman
01AS Fur Farmer
06AF Game Farm Helper
06AG Game Warden
01AT Gardner
01AU Geologist
01AV Grain Buyer
0800 Health Cluster
04AG Heavy Equipment Operator
15AD Helicopter Pilot
01AW Horse Breeder
0900 Hospitality and Recreation Cluster
05AF Janitor
01AX Kennel Owner
02AC Keypunch Operator
14AF Librarian
15AE Long Haul Truck Driver
01AY Lumber Grader
10AB Machinist
01AA Magician
14AG Mail Carrier
1000 Manufacturing Cluster
1100 Marine Science Cluster
1200 Marketing and Distribution Cluster
08AB Medical Technologist
06AH Meteorologist
01AZ Milk Hauler
01BA Miller
01BB Mining Engineer
14AH Minister
12AE Model
13AC Mortician
06AI Naturalist
03AA News Photographer
01BC Nurseryman
08AC Nurses Aide
11AF Oceanographer
02AD Office Clerk
10AC Packaging Worker
04AH Painter
09AB Park Ranger
1300 Personal Service Cluster
08AD Pharmacist
08AE Physical Therapist
04AI Plumber
14AI Policeman
09AC Porter
01BD Poultry Farm Hand
14AJ Power Plant Operator
09AD Pro Athlete
1400 Public Service Cluster
01BE Quarry Worker
03AB Radio Announcer
02AE Receptionist
06AJ Recycling Foreman
03AC Reporter
05AG Restaurant Manager
01BF Rig Builder
01BG Sawyer
05AH Seamstress
01BH Seed Cone Picker
06AK Sewage Plant Operator
05AI Sewing Machine Operator
01BI Soil Conservationist
11AG Submarine Worker
04AJ Surveyor
15AF Taxi Driver
03AD Telegrapher
07AD Theatre Director
1500 Transportation Cluster
01BJ Tree Trimmer
03AE TV Cameraman
02AF Typist
06AL Urban Planner
01BK Veterinarian
05AJ Waiter
12AF Warehouse Worker
06AM Water Systems Foreman
04AK Welder

PENNSCRIPT

TITLE FOUNDRY WORKER

D.O.T.# 519.887

Are you thinking of becoming a foundry worker? A foundry worker does one or more of the operations involved in making metal castings. Some things made of metal castings are car parts, bathtubs, tools, and plumbing and electrical fixtures.

DO YOU KNOW:

* What the job requirements are?
* What training is needed and where you can get it?
* What classroom subjects can help you prepare for this job?
* What the job opportunities are for a foundry worker?

If you do not know the answers to these and other important questions, take some time to read this PENNscript.

TO GET THE JOB

YOU SHOULD BE ABLE TO:

* Work as a member of a team.
* Work safely.
* Pay attention to details.
* Use good judgement.
* Do new tasks well.
* Accept responsibility.

YOU SHOULD PREFER TO:

* Work with and around motors and machinery.
* Do work that requires lots of strength and energy.
* Do work that is somewhat routine.

YOU SHOULD BE PHYSICALLY ABLE TO:

* Work with strength and energy.
* See and hear well.
* Stay on your feet all day.
* Lift, reach, bend and stoop well.
* Lift 75-100 pounds.

YOU SHOULD KNOW THAT:

* There is danger of burns, cuts and scratches.

1004

DISTRIBUTED BY:

Career Education Service
Central Susquehanna Intermediate Unit
Box 213, Lewisburg, Penna. 17837

A COOPERATIVE PROGRAM
CAPITAL AREA INTERMEDIATE UNIT 15
PENNSYLVANIA DEPARTMENT OF EDUCATION

Foundry Worker

ON THE JOB

Foundry jobs are found in metal working industries that use iron, steel, aluminum, copper, magnesium and lead. Usually foundries are small to medium-sized plants that hire fewer than 250 workers.

There are several methods of casting metal objects, but the most common one is green-sand molding. Green-sand molds, or patterns, are made of silica and clay. These molds are shaped by packing the moist clay mixture around a model of the metal piece to be cast. Then the model is taken out and a neatly-shaped mold hole is left. Molten metal is poured into the mold hole to form the desired metal shape.

Some Types of Foundry Jobs Are:

* Patternmaker makes a wood or metal pattern in the shape of the casting desired.
* Hand molder makes molds by packing and ramming clay-mixture around the pattern.
* Machine molder runs a machine that makes molds for large numbers of identical castings.
* Coremaker shapes sand, prepared by sand mixer, into cores (bodies of sand designed to create hollow spaces in castings).
* Melter or cupola tender runs the furnace that melts metal.
* Pourer pours the molten metal into the molds to make castings.
* Shakeout person removes the castings from the molds.
* Shotblaster runs a machine which cleans the castings by blowing them with air mixed with metal shot or grit.
* Tumbler operator controls a barrel that is filled with sand or water and the castings. This method also removes sand, burrs and scale from the castings.
* Chippers & grinders remove excess metal to finish the castings.
* Casting inspector checks casting to make sure that all casts meet specifications.

THINGS TO THINK ABOUT

WORKING CONDITIONS:

* Pay scale is above the national average for factory workers.
* Overtime work pays very well.
* There are job opportunities all over the United States for foundry workers.
* There are chances for training and advancement.
* This type of work is hard and physically tiring.
* Shift work may be inconvenient.
* The accident rate among foundry workers is high.

ADVANCEMENT:

* From apprentice or laborer, a worker may advance to journeyman.
* An experienced worker may be promoted to foreman or supervisor.

BENEFITS:

* Paid vacations and holidays
* Incentive awards
* Insurance programs (medical and life)
* Retirement pensions

RELATED OCCUPATIONS:

* Blacksmith
* Machinist
* Plumber
* Rolling mill operator
* Welder

Foundry Worker

PREPARATION AND TRAINING

National:

* A high school or vocational school education is usually needed.
* Training is done mostly on the job.
* Vocational school courses in patternmaking, metal work and foundry practices will better the chances for advancement.
* Some apprenticeships are offered.

Columbia, Montour, Northumberland, Snyder and Union Counties:

* At least an eighth grade education is required in this area.
* Training for foundry workers is on the job.

EMPLOYMENT OPPORTUNITIES

National:

* There are 450,000 foundry workers employed in 6,000 foundries in the United States.
* Most foundry workers are in the states of Pennsylvania, Illinois, Michigan, Ohio and California.

Columbia, Montour, Northumberland, Snyder and Union Counties:

* Job opportunities are nonexistent in the Shamokin area, fair in the Berwick area and good in the Milton and Sunbury areas.
* There is a demand for workers in the Berwick and Sunbury areas.
* There is a high turnover rate for foundry workers in these areas.
* Opportunities are expected to remain about the same during the next year.

EARNINGS

	Number of Hours Per Week	Average Weekly Starting Salary
National:	40	$120-$140

Columbia, Montour, Northumberland, Snyder and Union Counties:

* Overtime pay is usually available for foundry workers.

	Number of Hours Per Weekly	Average Weekly Starting Salary
	40	$92-$116

WHERE TO GET MORE INFORMATION

* SEE YOUR SCHOOL COUNSELOR.

* Dictionary of Occupational Titles
  U.S. Government Printing Office
  Washington, D.C. 20402
  (available at most high schools)

WHERE TO GET MORE INFORMATION

* Occupational Outlook Handbook
  U.S. Government Printing Office
  Washington, D.C. 20402
  (available at most high schools)

* American Foundrymen's Society
  Golf and Wolf Roads
  Des Plaines, Illinois 60016

* Gray and Ductile Iron Founders' Society, Inc.
  Cast Metals Federation Building
  Rocky River, Ohio 44116

* International Molders' and Allied Workers' Union
  1225 East McMillan Street
  Cincinnati, Ohio 45206

* Malleable Founders Society
  Cast Metals Federation Building
  Rocky River, Ohio 44116

* National Foundry Association
  9838 Roosevelt Road
  P.O. Box 76
  Westchester, Illinois 60156

* Non-Ferrous Founders' Society
  200 Center Ridge Road
  Cleveland, Ohio 44116

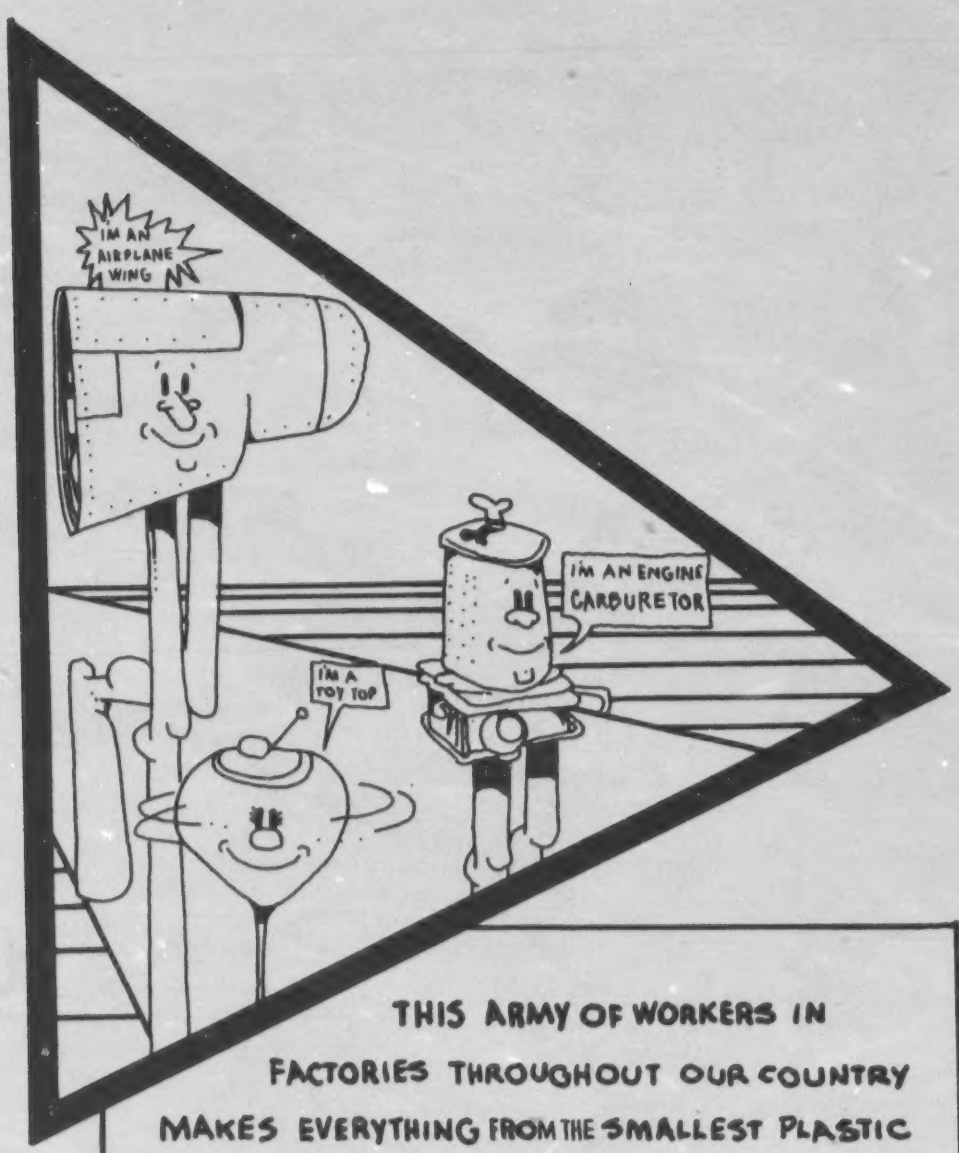
* BUREAU OF EMPLOYMENT SECURITY OFFICES

  * 118 East Third Street
    Berwick 18603

  * 45 Locust Street
    Milton 17847

  * 941 West Arch Street
    Shamokin 17872

  * 535 Chestnut Street
    Sunbury 17801



THIS ARMY OF WORKERS IN FACTORIES THROUGHOUT OUR COUNTRY MAKES EVERYTHING FROM THE SMALLEST PLASTIC TOY OR ENGINE PART TO THE LARGEST AIRPLANE IN OUR SKIES OR THE LARGEST SHIP IN OUR NAVY.

RECREATION WORKERS

(D.O.T. 079.128, 187.118, 195.288)

Nature of the Work

Modern technological advances increasingly have raised the standard of living and provided leisure time for most people. How people spend their nonworking hours is now a major concern. Recreation workers help people to enjoy and use their leisure time constructively by organizing individual and group activities and by administering physical, social, and cultural programs for all age groups at camps, playgrounds, community centers, and hospitals. They also operate recreational facilities and study the recreation needs of individuals and communities.

Recreation workers employed by local government and voluntary agencies direct activities at neighborhood playgrounds and indoor recreation centers. They provide instruction in the arts and crafts and in sports such as tennis and basketball. They may supervise recreational activities at correctional institutions and work closely with social workers in organizing programs of recreation for the young and the aged at community centers and social welfare agencies.

Many persons work in industrial, hospital, military, or school recreation. Recreational workers in industry plan programs for company employees and organize bowling leagues, softball teams, and similar activities. Sometimes, they plan fund drives and company social functions. Hospital recreation workers plan recreation programs for the ill and the handicapped in hospitals, convalescent homes, and other institutions. Working under medical direction, they organize and direct sports, dramatics, and arts and crafts for persons suffering from mental problems and physical disabilities. School recreation workers organize the leisure-time activities of school-age children during school-days, weekends, and vacations.

Some part-time recreation workers and volunteers assist full-time workers throughout the year but mostly during the summer months. Part-time workers are largely college students and teachers. They work primarily as recreation leaders and camp counselors, organizing and leading games and other activities at camps and playgrounds.

Recreation worker instructs archery class.

Places of Employment

About 13,500 professional recreation workers were employed full time in 1970; about one-half are women. The majority worked for local governments and voluntary agencies. Most of the remainder were employed by religious organizations or by the Federal Government in national parks, the Armed Forces, the Veterans Administration, and correctional institutions. Some recreational workers were employed by industry, and a few taught in colleges and universities.

Recreation workers are employed in all parts of the country; however, a large proportion are employed in California, Massachusetts, New Jersey, New York, Ohio, Pennsylvania, and Texas.

Training, Other Qualifications, and Advancement

Most employers prefer college graduates who have majored in rec-

reation, social science, or physical education for work in the recreation field. However, fewer than one-half of the recreation workers currently employed have this educational background. Persons interested in becoming recreation workers should take a broad range of courses in college. The typical program of study includes courses in communication, natural sciences, the humanities, philosophy, sociology, drama, and music. Specific courses in recreation include group leadership, program planning and organization, health and safety procedures, outdoor and indoor sports, dance, arts and crafts, and field work (actual recreation leadership experience).

Advanced courses in recreation or public administration leading to the master's degree are desirable for persons interested in higher level administrative postions. Students interested in industrial recreation may find it desirable to take courses in business administration; and those interested in working with the aged in hospitals as recreation specialists should take courses in psychology, health education, and sociology.

Training leading to a bachelor's degree with a major in recreation was available in over 130 schools in 1970. About 70 offered a master's degree and about 30 offered a doctorate in recreation. Over 60 junior colleges offer programs in recreation.

Young people planning a career as a recreation worker must have the ability to motivate people and be sensitive to their needs. Good health and physical stamina are required to participate in sports. Activity planning often calls for creativeness and resourcefulness. Since the recreation worker organizes sports, supervises art projects, and gives fund-raising speeches, he should have a variety of skills. Recreation workers should be able to accept responsibility and exercise judgment since they usually work alone.

To increase their leadership skills and understanding of people, students should obtain related work experience in high school and college. They may do volunteer, part-time, or summer work in recreation departments, camps, youth-serving organizations, institutions, and community centers.

Most college graduates entering the recreation field begin as leaders or specialists, although each year a small number of college graduates enter trainee programs that lead directly to recreation administration. A few large cities and organizations offer these programs which generally last 1 year.

The National Recreation and Park Association administers a national internship program to give advanced training and experience to graduates of recreation curriculums. Stipends varying from $6,000 to $8,000 a year are available.

Recreation leaders work directly with groups and individuals to organize and teach diversified activities, such as athletics and social recreation in indoor and outdoor centers. They also supervise nonprofessional workers and assist in administering recreation programs. Recreation specialists organize and develop one activity or several closely related activities. They sometimes oversee nonprofessional workers.

After a few years' experience, recreation leaders and specialists may become recreation directors; those having graduate training, however, may start at this level. Directors are responsible for the operation of the facilities, staff supervision, and the development and execution of programs at a particular recreation center, as well as the preparation of budgets and the analysis of recreation programs.

Opportunities for advancement to administrative positions often are limited for persons who have no graduate training. However, advancement is sometimes possible through a combination of education and experience. Administrative jobs require varying years of experience in full-time recreation work, depending upon the size of the community or organization and the program.

Employment Outlook

Employment of recreation workers is expected to increase very rapidly, through the 1970's. Several thousand recreation workers will be needed annually for growth and to replace personnel who leave the field because of retirements, deaths, or transfers to other occupations. In recent years, the number of college graduates having a major in recreation has fallen far short of the demand, and this pattern is expected to continue. Thus, many new recreation workers will continue to be hired from the fields of social science, physical education, and health education. Persons having less than full professional training also will find employment opportunities. As a result of the great demand for recreation workers, part-time and volunteer personnel will be needed, particularly in social welfare agencies and at the local government level.

Factors that will contribute to growth include increased leisure time and rising levels of per capita income. As income levels rise, more persons will participate in a variety of competitive and noncompetitive sports and larger numbers will travel to parks and resorts for

camping, hiking, fishing, and other recreational pursuits. In addition, improvements in the national highway system will make many State parks and national forests more accessible to vacationing families. Population growth also will create a demand for more recreation workers to expand existing recreation programs and to aid larger numbers of mentally and physically handicapped persons. Longer life and earlier retirements will increase the number of clubs and organizations for retired persons, and thus increase the need for recreation workers.

Other reasons for the anticipated longrun expansion in the number of recreation workers include a growing interest and participation in recreation activities by the general population; the continued trend toward urban living; the rise in industrial recreation activities as more companies promote recreation programs for their employees; increased attention to physical fitness by government, educators, industry and others; and the initiation of programs to insure the preservation of outdoor recreation areas. A number of recent Federal laws also will contribute to the rising demand for recreation workers. Among these are the Elementary and Secondary Education Act of 1965, which includes provisions for grants to local educational agencies for improving and expanding recreation opportunities for the educationally deprived; and the Older Americans Act of 1965, which provides grants to States for programs, including recreation, for older persons.

Earnings and Working Conditions

Beginning recreation leaders having a bachelor's degree earned between $7,200 and $7,800 annually in 1970, according to the National Recreation and Park Association. In the same year, the salaries of recreation supervisors ranged from $8,500 to $10,000, depending upon their qualifications and the size of the community in which they were employed. Salaries of recreation directors or superintendents generally ranged from $12,000 in some small communities to over $22,000 in many large cities. Regions varied in their salary levels—higher salaries generally were paid in the West than in other areas of the country.

In 1970, the annual starting salary for inexperienced recreation workers in the Federal Government was $6,548 or $8,098, depending on their academic records or specialized training. Experienced recreation workers in Federal positions generally earned between $9,900 and $14,200 annually.

The average workweek for recreation workers is 40 hours, although some work upwards of 50 hours. A person entering the recreation field should expect some nightwork and irregular hours, for many recreation personnel work while other persons are enjoying their leisure time. Most public and private recreation agencies provide from 2 to 4 weeks' vacation and other fringe benefits, such as sick leave and hospital insurance.

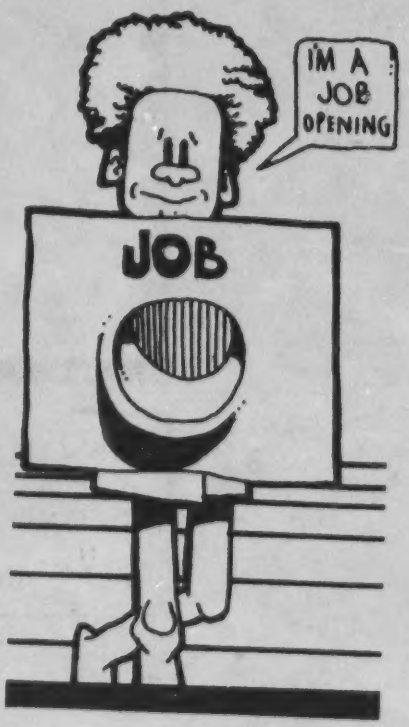
Sources of Additional Information

Information about recreation as a career and about employment opportunities in the field may be obtained from:

National Industrial Recreation Association, 20 North Wacker Dr., Chicago, Ill. 60606.

National Recreation and Park Association, 1700 Pennsylvania Ave. NW., Washington, D.C. 20006.

Information about employment opportunities in Veterans Administration hospitals may be obtained directly from the hospitals or from the Department of Medicine and Surgery, Veterans Administration, Washington, D.C. 20421.



(Source: Occupational Outlook Handbook 1972-73)

HOSPITALITY AND RECREATION

THE FIELD OF HOSPITALITY AND RECREATION IS ONE OF THE FASTEST GROWING CAREER AREAS IN OUR COUNTRY TODAY.

DISTRIBUTED BY:

Career Education Service
Central Susquehanna Intermediate Unit
Box 213, Lewisburg, Penna. 17837

PENNSCRIPT

TITLE CARPENTER

D.O.T. # 860.381

Are you thinking of becoming a carpenter? A carpenter is a skilled woodworker who works on the construction of everything from wood frames to office buildings.

DO YOU KNOW:

* What the job requirements are?
* What training is needed and where you can get it?
* What classroom subjects can help you prepare for this job?
* What the job opportunities are for a carpenter?

If you do not know the answers to these and other important questions, take some time to read this PENNscript.

TO GET THE JOB

YOU SHOULD BE ABLE TO:

* Read and understand blueprints and diagrams.
* Work arithemetic problems quickly and accurately.
* Skillfully use hand and power tools.
* Work under pressure of a deadline.
* Work both alone and as a member of a team.

YOU SHOULD PREFER TO:

* Work both inside and outside.
* Work with your hands.
* Build things from drawn or written plans.
* Follow directions and instructions from others.

YOU SHOULD BE PHYSICALLY ABLE TO:

* Climb, stoop, grasp and crouch while working.
* Stand for long periods of time.
* Work with greater than average strength and stamina.
* Work in high places.
* Maintain good hand-eye coordination.

YOU SHOULD KNOW THAT:

* Carpenters often receive minor injuries such as cuts and bruises.
* The work of a carpenter is seasonal.
* Hourly wages do not completely indicate annual incomes because of slow seasons.

A COOPERATIVE PROGRAM
CAPITAL AREA INTERMEDIATE UNIT 15
PENNSYLVANIA DEPARTMENT OF EDUCATION

DISTRIBUTED BY:

Career Education Service
Central Susquehanna Intermediate Unit
Box 213, Lewisburg, Penna. 17837

0403

Carpenter

ON THE JOB

Carpenters construct the wooden framework of buildings. They are the largest group of workers in the building trades. When the building is ready for trimming, carpenters install molding, wood paneling and cabinets. They also put in window sashes, door frames, doors and hardware, and build stairs and lay floors. Carpenters are concerned with appearance as well as accuracy when doing their finishing work.

Carpenters also install heavy timbers used in constructing docks, railroad trestles and similar installations. Some of them build forms needed for concrete decks, columns, piers and walls which are used in the erection of bridges, buildings and other structures.

The main tools used by carpenters are hammers, saws, chisels and planes. They use nails, bolts, screws or glue to fasten materials. They also use power tools such as portable power saws, drills and rivet guns.

Carpenters must be able to read and work from building plans. They must be able to size up a job, decide what to do, how to do it, and what materials and tools are needed. They must measure and cut the lumber to proper, workable size and fasten the materials with nails, pliers or glue. Because of the wide variety of carpentry jobs, some carpente become specialists. Some do rough outside work; others lay floors and build stairs. Still others do trim work and cabinet making. There is more specialized work in large cities, while rural carpenters may even do painting, glazing or roofing.

WORKING CONDITIONS:

* Carpenters work both inside and outside.
* Work is seasonal.
* There is pressure to complete jobs during good weather.
* Construction work can be dangerous.
* There is overtime work involved.
* Hours are long during good weather.
* Work is often noisy and dirty.
* Carpenters are often on their feet, sometimes in high places and in cramped positions.
* A carpenter's tools are very expensive.
* Many carpenters are members of unions.

ADVANCEMENT:

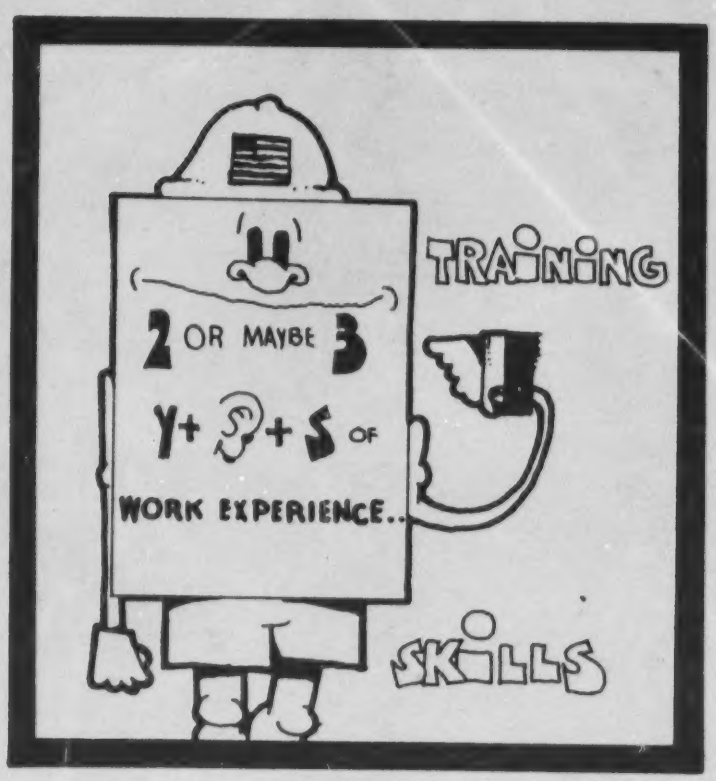
* Carpenters may be promoted to supervisors.
* Carpenters have a good chance for advancement in general construction because of their knowledge of the complete job.
* Opportunity for self-employment is good.

BENEFITS:

* Paid vacations and holidays
* Health insurance
* Retirement benefits
* Compensation for overtime

RELATED OCCUPATIONS:

* Bricklayer
* Cabinetmaker
* Machinist
* Millworker
* Painter
* Paper hanger
* Plumber
* Stonemason
* Welder



Carpenter

PREPARATION AND TRAINING

National:

* A high school diploma or its equivalent is desirable.
* High school courses in industrial arts, math and mechanical drawing are helpful.
* Informal training such as farm work is also helpful.
* Many trade schools and correspondence courses give instruction in carpentry.
* Most unions require a four-year apprenticeship.
* Apprenticeship applicants must be 17 to 27 years old.
* Applicants should be in good physical shape, have a good sense of balance and not fear heights.
* Applicants should have good manual dexterity and be able to solve arithmetic problems.
* Apprenticeship programs include four years of on-the-job training and an additional 144 hours of related classroom work.
* During the apprenticeship the trainee learn all phases of the carpentry from structural design to window framing.
* The apprentice receives related classroom instruction in drafting and blueprint reading.

Columbia, Montour, Northumberland, Snyder and Union Counties:

* High school graduates are preferred.
* A high school carpentry program is offered at:
  * Columbia-Montour Area Vocational Technical School
  * Northumberland County Area Vocational Technical School
* Post high school training in carpentry is offered at:
  * Columbia-Montour Area Vocational Technical School
  * Southern Columbia Junior-Senior High School
  * Northumberland County Area Vocational Technical School
* A certificate program in carpentry is offered at:
  * Williamsport Area Community College
    Williamsport
* An associate degree in carpentry and building construction technology is offered at:
  * Williamsport Area Community College
    Williamsport
* An apprenticeship program is one of the best ways to learn this trade.

EMPLOYMENT OPPORTUNITIES

National:

* Employment of carpenters should increase rapidly in the 1970's.
* The expected large rise in construction, particularly homebuilding, will open many carpentry jobs.
* Improved technology in construction, new materials that are already assembled and better tools will limit carpentry jobs to an extent.

See page five for more information.

Carpenter

EMPLOYMENT OPPORTUNITIES

State Civil Service Commission:
* Opportunities may be available in the Civil Service.

Columbia, Montour, Northumberland, Snyder and Union Counties:
* Job opportunities are fair for carpenters in this area.
* There is a slight demand in the Sunbury area.
* The number of job openings is expected to remain about the same during the next year.

EARNINGS

National:
* Union members generally receive higher wages than independents.
* Apprentices start at 50 percent of the journeymen wage and increase to 90 percent in the last period of apprenticeship.

	Number of Hours Per Week	Average Weekly Starting Salary
	40	$336 (journeyman)
State Civil Service Commission:	37½-40	$160-$171
Columbia, Montour, Northumberland, Snyder and Union Counties:	40	$100-$140 (Non-union, entry level)
	40	$160-$180 (Non-union, experienced)
	40	$240-$336 (Union, journeman)

WHERE TO GET MORE INFORMATION

* SEE YOUR SCHOOL COUNSELOR.

* Visit your local carpenter's union.

* See the Civil Service card at the beginning of this PENNscript deck.

* Dictionary of Occupational Titles
U.S. Government Printing Office
Washington, D.C. 20402
(available at most high schools)

* Occupational Outlook Handbook
U.S. Government Printing Office
Washington, D.C. 20402
(available at most high schools)

See page six for more information.

Carpenter

WHERE TO GET MORE INFORMATION

* American Federation of Labor and Congress of Industrial Organization
  Building and Construction Trades Department
  815 16th Street NW.
  Washington, D.C. 20006

* Associated General Contractors of America
  1957 E Street NW.
  Washington, D.C. 20006

* National Association of Home Builders of the United States
  1625 L Street NW.
  Washington, D.C. 20036

* United Brotherhood of Carpenters and Joiners of America
  Apprenticeship and Traning Department
  101 Constitution Avenue NW.
  Washington, D.C. 20001

* BUREAU OF EMPLOYMENT SECURITY OFFICES

  * 118 East Third Street
    Berwick 18603

  * 45 Locust Street
    Milton 17847

  * 941 West Arch Street
    Shamokin 17872

  * 535 Chestnut Street
    Sunbury 17801

CONSTRUCTION

CLUB WORKERS

Groups of people with common purposes and interests tend to organize in clubs. Such organizations include social, fraternal, athletic, and service groups. They meet in clubhouses or rooms and, depending on the size and structure of the group often employ different types of individuals to attend to the maintenance of the organizations.

Most clubs provide a range of services and activities for the enjoyment of their members. Restaurants, bars, game rooms, golf courses, movies, and tennis courts are among the many possibilities. These activities create numerous jobs: from cooks, waiters, and kitchen help to a professional golf or tennis instructor.

Most clubs form a board of directors or steering committee to oversee the club's operation. This body will usually employ a club manager to handle day to day maintenance. It is the manager who hires and fires additional help, subject to the board's approval. Working conditions are generally pleasant. The core of club members remains relatively constant, so that workers feel comfortable in friendly, familiar surroundings. Sometimes they are allowed to take advantage of the club facilities.

The busiest times in most clubs, particularly social organizations, are in the evenings, on weekends, and during holidays. Because the club represents a source of pleasure and relaxation to its members, it follows that they would congregate there in their leisure.

The training and education required depend on the area of job specialization. Careers as a chef, for example, would require apprenticeship and experience. The tennis pro would need natural ability and skill as a teacher. The club manager in a very prestigious club might be required to pursue university courses in hotel management and business administration. Minimally, he needs a high school diploma.

Clubs are generally pleasant places to work. The pay depends on the wealth of the organization and on the particular job in which the individual is employed. Some clubs have rules against tipping, but others allow the staff to receive gratuities. These may be most frequent during the holiday seasons.

Some workers may find the hours inconvenient if they are in a position which demands that they work during the busiest times. Unless the club is very large, there is little opportunity for advancement.

APPENDIX L

Annotated Bibliographies

1. Resources and multi-media
2. Books and articles
3. ERIC documents relevant to curriculum development
4. ERIC documents relevant to career education

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

ERIC DOCUMENTS RELEVANT TO CURRICULUM DEVELOPMENT IN CAREER EDUCATION

ED NUMBER	TITLE	AUTHOR	PUB DATE
016 268	Career Simulation for Adolescent Pupils	Barbula, P.M. Isaac, Stephen W.	Nov. 67 48 p.
022 056	An Experimental Junior High School Course in Occupational Opportunities and Labor Market Processes Final Report	Darcy, R.L. Ohio University	1968 611 p.
023 856	Guide to Structure & Articulation of Occupational Education Programs	Oregon St. Dept. of Education	1968 109 p.
024 838	A Demonstration System of Occupation Information for Career Guidance	St. Univ. of N.Y.	June 1968 118 p.
031 723	World of Work. Grade Nine Teacher's Guide for the School Year 1967-68	Minnesota	1968 30 p.
037 754	Gaming for Vocational Awareness, A Systems Approach	Roberts, Tommy L. Keahey, Scott P.	1970 29 p.
044 495	Review & Analysis of Curricula for Occupations in Metalworking	Snyder, Thomas Butler, Roy L..	Oct. 1970 31 p.
044 496	Review & Analysis of Curricula for Occupations in Construction	Lewis, Wiley B.	Oct. 1970 34 p.
044 719	Total Career Capability for All: A Career Development Program Model	Douglas S. Baugh William E. Martin	1970 64 p.
045 817	Review & Analysis of Curricula for Occupations in Environmental Control	Wiley B. Lewis	Dec. 1970 36 p.

ED NUMBER	TITLE	AUTHOR	PUB DATE
048 448	Terminal Performance Objectives for Selected Programs in Business Education, D.E., Work Experience Education and Career Guidance	San Mateo Union High School District	1970 77 p.
049 356	A Guide for Teachers of a Course in Career Exploration Grades 8-9-10	Oklahoma Voc.	1970 159 p.
050 279	Occupational Orientation: An Introduction to the World of Work	Mississippi State University	1969 226 p.
052 377	Introducing Children to the World of Work	Oregon Dept. of Education	20 p.
052 477	Workshop in Developing Guidelines for Planning Career Development Programs K-12 in Ohio	Robert L. Darcy et al	1971 83 p.
053 289	Suggested Teaching-Learning Approaches for Career Development in the Curriculum	Minnesota Univ.	1968 182 p.
053 313	Papers Presented at the Workshop on the Development of Guidelines for Planning Career Development Programs K-12 in Ohio	Kenneth Hoeltzel	1971 100 p.
055 25	The Occupac Project (A Project to Develop Occupational Information Learning Activity Packages for Grades K-9) Final Report	Marla Peterson et al Eastern Illinois University	1971 453 p.
056 226	An Investigation of the Effectiveness of a Design to Initiate Curriculum Change in Home-Economics Follow-Up Phase II Final Report	Mary Bach Kievit Rutgers	1971 140 p.
059 368	The World of Work. A Curriculum Guide for Grades One through Twelve	Leah J. Pointer Ed. Systems Dev. Corp.	72 p.

ED NUMBER	TITLE	AUTHOR	PUB DATE
059 402	Review and Synthesis of Foundations for Career Education	Edwin L. Herr	1972 85 p.
061 427	An Occupational Clustering System and Curriculum Implications for the Comprehensive Career Education Model	John E. Taylor Human Resources Research Organization	1972 80 p.
058 418	Project Vigor: Vocational Cluster Education, integrated and articulated grades 1 through 14 with guidance services	Omer McCaleb, David Douglas Public Schools Portland, Oregon	1971 53 p.
059 365	Career Education: A Curriculum Model and Strategies for Implementation	Herbert B. Holstein et al West Virginia	1971 21 p.
060 198	A Curriculum Model for Facilitating Career Development	Larry J. Bailey Southern Ill. Univ.	29 p.
062 580	Career Development Education K through Post-Secondary and Adult Education	Gene Bottoms, Ga. Dept. of Education Div. of Voc. Ed.	1971 45 p.
063 505	Business and Office Education: Instructional Materials	Ohio State Univer. Columbus Center for Vo/tech Ed.	1972 127 p.
065 688	Junior High Career Guidance Curriculum--Student Centered Occupational Preparation & Exploration (SCOPE) Teacher Supplement	Kolene M. Granger Utah State Board of Education	1972 333 p.
067 503	A Tentative Framework for Developing Comprehensive K-12 Career Education. Career Ed. K-12--The World of Work	Texas Education Agency, Austin	1972 24 p.
059 404	Strategies for Teaching English in Career Education Final Report	Gary L. Houpt	Aug. 1971 142 p.
060 224	A First Step Toward Career Education. A project to identify, compile, catalogue	Palo Alto Ed. Systems	Jan. 1972 251 p.

ED NUMBER	TITLE	AUTHOR	PUB DATE
063 547	Teaching for Career Decision-Making	Jerry Miltenberger Joan Kosuth	1972 114 p.
064 502	Workshop Handbook: Writing Measurable Objectives for Career Education	Illinois Voc. Ed.	81 p.
067 487	Introducing Career Education to Teachers: A Handbook for Consultants, Workshop leaders, and Teacher Educators	Illinois Voc. Ed.	April 1972 108 p.
067 511	Project VIGOR: A Vocational Cluster Education, Integrated and Articulated, Grades 1 through 14 with guidance services, occupational exploration and work experience relevant to general education	David Douglas Public Schools Portland Oregon Org. State Brd. of Ed.	June 1972 88 p.
059 119	National Assessment of Educational Progress. Objectives for Career and Occupational Development	Ed. Commission of the States Denver Colo.	1971 81 p.
062 539	Career Education: Papers presented at the 1972 Annual Meeting of the American Ed. Research Assoc.	AERA Washington, D.C.	April 1972 49 p.
063 520	Abstracts of Research and Development Projects in Career Education	Office of Education Vo/Tech Education	June 1972 153 p.
064 494	Career Development Resource Guide K-5	Howard Co. Brd. of Ed. Clarksville, MD.	80 p.
064 501	Hands On. A Comprehensive Program of Career Orientation for High School Students	William W. Jolly Knox Co. Dept. of Public Ins.	1971 246 p.
067 474	An Analysis of Fifteen Occupational Clusters Identified By the USOE.	Grayson County Coll. Sherman/Denison, Tex.	1972 417 p.

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

ERIC DOCUMENTS RELEVANT TO CAREER EDUCATION

ED NUMBER	TITLE	AUTHOR	PUB DATE	
010 076	Career Simulation for Sixth Grade Pupils	Shirts, R. Garry	1966	41 p.
010 799	Project 13	Anderson, Clara M.	1966	13 p.
012 939	Information Regarding the Use of the Life Career Game in the Palo Alto Unified School District Guidance Program	Varenhorst, Barbara		15 p.
013 456	Developmental Career Guidance in Action, The First Year	Leonard, George E. Wayne State Univ.		158 p.
015 513	Regional Center for Collection Synthesis & Diseemination of Career Information for use by the Schools of San Diego County	Whitfield, Edwin A. & Hoover, Richard	1967	163 p.
021 300	The Career Information Service A Guide to its Development & Use	Circle, Duncan F.	1968	416 p.
024 809	A Volunteer Program in Vocational Information & Career Guidance for Secondary Schools	Mullen, M. J.	1968	146 p.
026 527	A Pilot Project for Vocational Guidance in Economically Underdeveloped areas.	Miller, Carrol H.	1968	48 p.
026 534	Vocational Guidance in Secondary Education	Campbell Ohio State Univ.	1968	180 p.
034 042	Guidance Occupational Training A Vocational Work Experience Program for Intellectually Limited and Educationally Handicapped Students.	Albany Bureau of Occupational Education	1969	64 p.

ED NUMBER	TITLE	AUTHOR	PUB DATE
039 319	Review of Research on Student Selection and the Prediction of Success in Occupational Education	William Stock Frank Pratzner	1969 52 p.
039 321	Instruments for Vocational Guidance Selection and Placement	Idaho Kenneth Loudermilk	1969 118 p.
040 301	A Guide for the Development, Implementation, and Administration of Exemplary Programs & Projects in Vocational Education.	Gene Bottoms Kenneth Matheny	1969 42 p.
040 477	Career Development from Age 13 to Age 25.	Warren Gribbons Paul Lohnes	1969 229 p.
046 005	The Educational and Career Exploration System: Field Trial & Evaluation in Montclair High School	Albert S. Thompson	1970 277 p.
047 127	The Systems Approach: An Emerging Behavioral Model for Vocational Guidance	Robert E. Campbell et.al.	1971 33 p.
047 335	A Comprehensive Micro-Image File for Occupational Information	David Youst	1970 171 p.
050 005	Man: His Life and Work. A Career Orientation Manual for Teachers of 7th & 8th Grade Social Studies.	Cincinnati Schools	1970 179 p.
050 260	Feasibility Study of Career Ladder Curriculum & Guidance & Counseling.	Calif. Advisory Council on Vocational Ed. & Tech. Training	1971 24 p.
050 295	Career Education--More Than A Name.	Sidney Marland	1971 14 p.
050 296	The Plan for Implementation of an Exemplary Occupational Education Program in a Rural Community	Robert Morgan et.al. N. C. State Univ.	1970 32 p.
051 519	Job-Seeking Behavior and Vocational Development	Nancy D. Stevens	1971 17 p.

ED NUMBER	TITLE	AUTHOR	PUB DATE
052 239	Directory of Achievement Tests for Occupational Educat.on	Joseph Boyd Benjamin Shimberg	1971 181 p.
054 485	Educational Decision Maker: Antecedents & Consequences of Career Advice from the Guidance Counselor in the Process of Social Mobility	Richard A. Rehberg Lawrence Hotchkiss	1971 49 p.
055 215	Occutapes	Ohio State Dept. of Education. Div. of Guidance and Testing	1971 45 p.
055 237	A Longitudinal Study of Vocational Development: Implications for Vocational Education & Guidance	Joseph T. Impellitteri Jerome Kapes	1971 47 p.
056 227	Guidelines to Initiate and Operate Vocational Education Programs.	PDE Vo. Tech. & Con't Education	1971 83 p.
057 183	Career Guidance: An Overview of Alternative Approaches	Robert E. Campbell Louise Vetter	1971 21 p.
058 441	Core Curriculum for Human Services. Career Options Research & Development	Robert K. Soong et. al. YMCA Of Metropolitan Chicago	1971 53 p.
059 362	An Exemplary Program for Occupational Preparation. Interim Report	William G. Young	1971 95 p.
059 400	Curriculum Development In Vocational Education (organizational phase) Final Report	Council of the Great City Schools	1971 31 p.
065 687	Junior High Career Guidance Curriculum--Student-Centered Occupational Preparation and Exploration (SCOPE). Student workbook.	Kolene Granger Utah Board of Education	1972 252 p.
074 305	An Evaluation of Elementary Career Education Based on Language Achievement, Mathematics Achievement, and Occupational Awareness in Lincoln County, West Va. Volume I.	Levene A. Olson Marshall Univ. Huntington, W. Va.	1972 86 p.

ED NUMBER	TITLE	AUTHOR	PUB DATE
075 601	An Evaluation of a Staff and Community Implemented Model Integrating Career Development Concepts in a Total Educational Program K-12. Final Report.	Alameda County School Hayward, Calif.	1972 37 p.
075 639	K-14 Career Education Multi-Media Catalog	Lakeshore Tech. Inst. Sheboygan, Wisconsin	1972 129 p.
075 657	Search and Assessment of Commercial Career Education Materials.	Peak, Marwick, Mitchell and Company. Chicago, Illinois	1972 89 p.

APPENDIX M

Project Evaluation Forms

1. CEI - 1st week evaluation
2. Curriculum Workshop Pretest
3. Curriculum Workshop Posttest
4. Curriculum Workshop Evaluation
5. Phase II Evaluation
6. Final Participant Evaluation

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

Career Education Institute

1. Please summarize below your candid evaluation of this first week of the Career Education Institute (include weaknesses as well as strengths).

2. In your opinion, what was the most worthwhile activity of the past week?

3. Please suggest changes in organization, content, and activities as you think they would benefit the Institute.

4. What can the CEI Staff prepare for you before the second week of the Institute to assist in the assimilation of attitudes, skills, or knowledges related to career education?

5. At this point in the Institute, can you summarize below your perceptions of what results are expected from your involvement in the Institute?

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT
Career Education Institute

Phase II - Curriculum Workshop
Materials for Instruction Pretest

Directions: Give yourself a point value for each of the materials for instruction listed in accordance with the numerical scale below.

0 - The term has no meaning to me.

1 - The term is somewhat familiar, but the concepts are not clear.

2 - I have a general idea of the Instructional materials.

3 - I have some specific knowledge of this but little or no actual contact with practice.

4 - I have studied the topic in depth and/or have had contact through observation or practice.

____ 1. Textbooks
____ 2. Library books
____ 3. Company manuals
____ 4. Programmed Instruction
____ 5. Kits
____ 6. Slides
____ 7. Photos/pictures
____ 8. Filmstrips
____ 9. Transparencies
____10. Movies
____11. Records
____12. 8MM cartridge loops, (movies)
____13. Radio
____14. Educational TV (using regular Channels)
____15. VTV-Video tape recorders
____16. Microfilm, microform
____17. Remote acess, retrieval
____18. Telephone
____19. Cal-Computer assisted instructio
____20. Field trips
____21. Community specialists
____22. Overhead Projector
____23. Opaque projector
____24. Simulation/gaming
____25. Educational games
____26. Models
____27. Practice Materials
____28. Cassette tapes

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

Career Education Institute

Phase II-Curriculum Workshop

Workshop Concepts Posttest

Direction: Give yourself a point value for each term listed in accordance with the numerical scale below.

0 - The term has no meaning to me.

1 - The term is somewhat familiar, but the concept is not clear.

2 - I have a general idea of the meaning.

3 - I have some specific knowledge of this but little or no actual contact with practice.

4 - I have studied the topic in depth and/or have had contact through observation or practice.

_____ paraprofessional

_____ national assessment

_____ learning packages (LAP)

_____ movies

_____ flexible scheduling

_____ humanistic education

_____ domains of behavior

_____ 8MM cartridge loops (movies)

_____ year round school

_____ textbooks

_____ models

_____ behavioral objectives

_____ overhead projector

_____ radio

_____ individualized instruction

_____ company manuals

_____ differentiated staffing

_____ library books

_____ educational games

_____ units, modules, tasks

_____ practice materials

_____ CAI-Computer assisted instruction

_____ accountability

_____ micro-teaching

_____ performance contracting

_____ career education

_____ slides

_____ telephone

_____ computer assisted instruction

_____ filmstrips

_____ photos / pictures

_____ kits

_____ mini course

_____ educational park

_____ transparencies

_____ VTR - Video tape recorders

_____ task instruction sheets

_____ records

_____ community specialists

_____ microfilm, microform

_____ sensitivity training

_____ interaction analysis

_____ systems analysis

_____ voucher plan

_____ Thematic Resources and Activities for Career Education (TRACE)

_____ opaque projector

_____ programmed instruction

_____ simulation games

_____ field trips

_____ educational TV

_____ compensatory education

_____ simulation / gaming

_____ remote acess retrieval

_____ Cassette tapes

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT
Career Education Institute

Phase II
Curriculum Workshop Evaluation

Please react honestly to the following scheduled presentations and activities, and vote each according to this scale:

4 - excellent, learned much and will use it
3 - good, applicable to classroom
2 - fair, some understanding gained
1 - poor, barely discussed
0 - missing or omitted, not covered

Monday

____ 1. discussion of workshop objectives and activities
____ 2. presentation on curriculum theory
____ 2. presentation on curriculum theory

____ 3. presentation on writing behavioral objectives

____ 4. activity-Bernabei and Leles worksheets

____ 5. activity-writing original behavioral objectives

Tuesday

____ 6. presentation on relating behavioral objectives to the cognitive, affective, and psychomotor domains and their levels

____ 7. activity - write original behavioral objectives to a specified domain and level

____ 8. presentation on the Career Education Concept

____ 9. presentation and discussion of the Career Development Education Model

____10. presentation, discussion, and homework on Thematic Resources & Activities for Career Education (TRACE) Format

Wednesday

____11. activity - "Listen to the Music"

____12. presentation on the Careers Cluster Concept

____13. activity - relating occupational activities to the 15 USOE Clusters

____14. activity - Would You Believe It's Puzzle Time?

____15. activity - sample, persue, try-out career education materials from CSIU

Thursday

____16. activity - prepare TRACE

Friday

____17. activity - show and tell of TRACES

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

Career Education Institute

Phase II

Workshop Evaluation

Directions: Please react honestly to the following statements. Use either checks, X's, or comments in the spaces.

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. The objectives of this workshop were stated clearly.				
2. Knowing the objectives of this workshop did not make it easier for me to do what was expected of me.				
3. What I've learned in this workshop will be useful to me in my teaching.				
4. The instructional procedures used in this workshop were "bookish" and not appropriate to the activities assigned.				
5. The instructional procedures gave me ideas that I can use in my teaching.				
6. The activities conducted in this workshop were directly responsible for helping me to meet the objectives.				
7. Working with the instructor helped me understand how to solve problems in my curriculum area.				
8. The competency-based measurement procedures used in this workshop were confusing.				
9. Thinking realistically, the unit that I developed can be used this spring in my classroom.				
10. If I were given the chance, I would like to take other workshops like this one.				

Open Comments:

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

CAREER EDUCATION INSTITUTE

In order to evaluate the Career Education Institute, we need your opinion and comments. Please be as honest and specific as possible.

1. What have you personally gained from the CEI workshop(s)?

2. What influences do you think you have made on students, community, and/or other faculty?

3. What changes have occurred in your classroom as a result of CEI?

4. General comments:

Please complete and return this survey to Pupil Personnel Services, Central Susquehanna Intermediate Unit by June 15.

APPENDIX N

Project Information Forms

1. Personal Data Sheet
2. Community Resource Guide Sheets
3. Final Credit Sheet
4. Participant Recommendation Sheet

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

CAREER EDUCATION INSTITUTE

Personal Date Sheet

Name:_____

Mailing Address:_____

_____

Educational Background

Undergraduate work:

Major Field(s): _____ _____

Degree held: _____

College(s): _____

Post-graduate work:

Major Field(s): _____ _____

No. of credits: _____

Degree held: _____

College(s): _____

Professional Experience

Present Position:

Grade Level/Subject_____

District_____

No. of Years_____

Previous Position(s):

Grade Level/Subject_____ Grade Level/Subject_____

District_____ District_____

No. of Years_____ No. of Years_____

Berwick Area School District

1100 Fowler Avenue
BERWICK, PENNSYLVANIA 18603

MR. HAROLD ESTEP
Superintendent

Telephone 717 - 759-1251

The Berwick School District, through its Career Education Program is studying various ways of enriching the educational program of their schools. One way to widen students' educational opportunities, particularly in developing positive attitudes toward the dignity of work, learning skills and using leisure time wisely, is to use the resources of our community.

The purpose of this questionnaire is to record the interests and talents the people of the Berwick area would be willing to share with their young people.

The information you provide will be incorporated into a resource directory and will be distributed to teachers, guidance counselors and administrators.

All items on the questionnaire may not be applicable to you or your business. Any information you can provide with regard to your availability for the youth of Berwick will be greatly appreciated.

When completed, please return the attached form to Mr. Stephen Kundrat, Orange Street Junior High School, Berwick, Pennsylvania.

Your interest and cooperation in compiling this directory is greatly appreciated.

RESOURCE DIRECTORY QUESTIONNAIRE

NAME_____

PLACE OF EMPLOYMENT_____

ADDRESS_____

CONTACT PERSON_____

PHONE_____ JOB TITLE_____

JOB DESCRIPTION_____

_____

Indicate below ways in which you would be willing to help.

INDIVIDUAL CONTACT WITH AN INTERESTED STUDENT YES____ NO____

CLASSROOM SPEAKER_____

TOPIC/SUBJECT AREA_____

GRADE LEVEL_____

ADVANCE NOTICE_____

RESTRICTIONS_____

FIELD TRIP_____

SUBJECT AREA_____

GRADE LEVEL_____

NUMBER OF STUDENTS_____

ADVANCE NOTICE_____

RESTRICTIONS_____

HOBBIES OR SPECIAL TALENTS_____

GRADE LEVEL_____

ADVANCE NOTICE_____

RESTRICTIONS_____

WHAT AUDIO VISUAL MATERIALS WOULD YOU HAVE THAT TEACHERS AND/OR STUDENTS COULD UTILIZE?_____

_____

PLEASE INDICATE BELOW THE EXTENT YOU WOULD BE WILLING TO TRAVEL TO SHARE YOUR EXPERTISE WITH OTHER DISTRICTS (e.g. 10 mile radius, 20 mile radius, etc.)

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

CAREER EDUCATION INSTITUTE

			Credit	Approved Instructor, Please Initial
____	Week 1	Media (inservice)	(2)	_____
____	Week 2	Curriculum Development (inservice)	(2)	_____
____	Week 3	HDP (college or inservice)	(2)	_____

____ inservice

____ college Marywood--$20/credit
Penn State--$33/credit

Graduate credit from Bloomsburg State College has been approved by the following departments: elementary, secondary, special education. If you are interested in obtaining this credit, please contact your advisor at BSC and set up your program.

NAME_____ADDRESS_____

CITY_____STATE_____ZIP_____

SCHOOL DISTRICT_____

BUILDING_____GRADE OR SUBJECT_____

SOCIAL SECURITY #_____CERTIFICATE NOW HELD_____

Please return this form to the Pupil Personnel Services Office, CSIU by June 15.

CENTRAL SUSQUEHANNA INTERMEDIATE UNIT

P. O. BOX 213 — LEWISBURG, PENNA. 17837

717-524-4431

CAREER EDUCATION INSTITUTE

List five (5) persons from your district that you would recommend as candidates for further career education workshops.

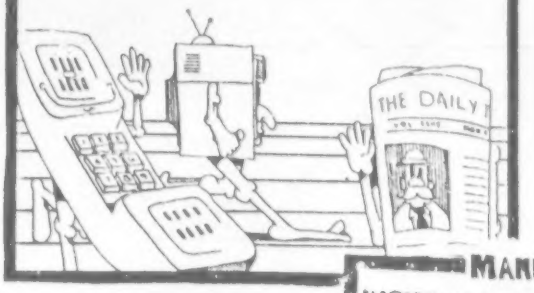
	NAME	BUILDING
1.		
2.		
3.		
4.		
5.		

_____
(submitted by)

Please return this form to CSIU-PPS by June 15, 1974.

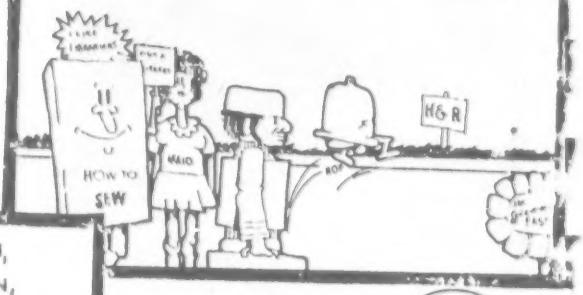
COMMUNICATIONS AND MEDIA

NEWSCASTERS, PHOTOGRAPHERS, ARTISTS (COMMERCIAL), EDITORS, OPERATORS, CAMERA TECHNICIANS, LINEMEN, WRITERS.



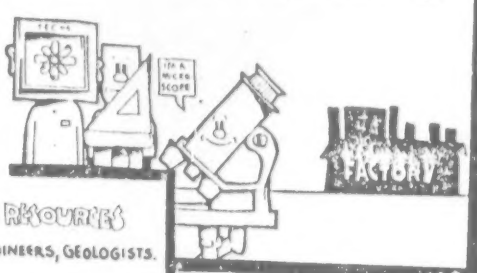
HOSPITALITY AND RECREATION

COOKS, MAIDS, WAITERS, WAITRESSES, HOTEL & MOTEL MANAGERS, DESK CLERKS, BELL HOPS, PARK RANGERS, THEATER OPERATORS, LIBRARIANS.



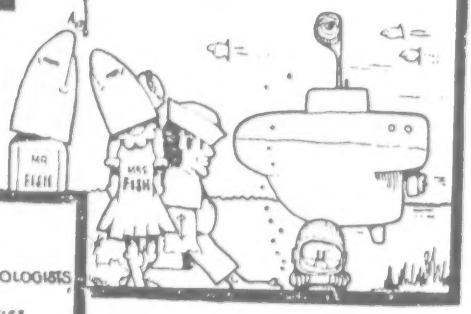
MANUFACTURING

ELECTRONICS TECHNICIANS, DRAFTSMEN, ENGINEERS, SCIENTISTS, JOURNEYMEN, ASSEMBLY LINE WORKERS.



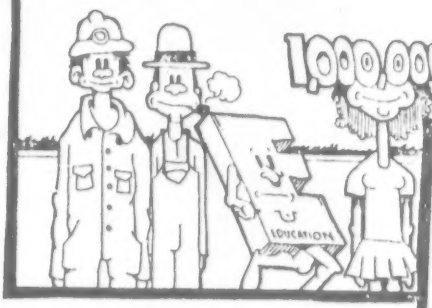
MARINE SCIENCE

OCEANOGRAPHERS, FISHERMEN, LABORERS, BOAT HANDLERS, DIVERS, LAB TECHNICIANS, SCIENTISTS, DOCK HANDS,



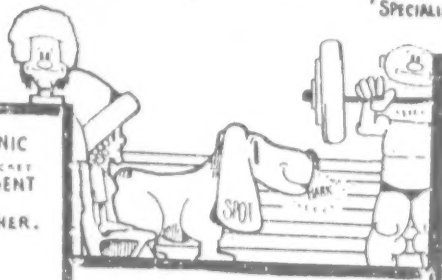
AGRI-BUSINESS / NATURAL RESOURCES

LUMBERMEN, MINERS, FARMERS, FORESTERS, ENGINEERS, GEOLOGISTS.



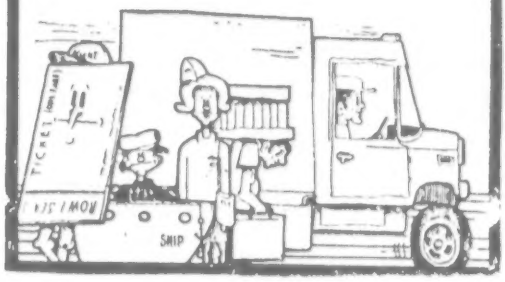
PERSONAL SERVICE

PHYSICAL CULTURISTS, BARBERS, COSMETOLOGISTS, FUNERAL DIRECTORS, KENNEL OPERATORS, EXERCISE SPECIALISTS.



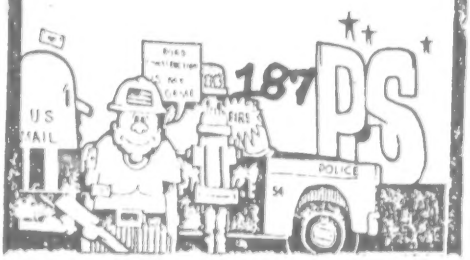
TRANSPORTATION

PILOT, BUS DRIVER, STEWARDESS, MECHANIC, SHIP CAPTAIN, TAXI DRIVER, TRUCKER, TICKET AGENT, BAGGAGE CLERK, ENGINEER, DISPATCHER.



PUBLIC SERVICE

TEACHERS, CITY OFFICIALS, POLICE, FIREMEN, SERVICEMEN (ARMY, NAVY, AIR FORCE, MARINES) POSTAL EMPLOYEES, HIGHWAY EMPLOYEES.



Career Education Services
Central Susquehanna Intermediate Unit
Box 213, Lewisburg, Penna. 17837